UNIVERSITY OF PENNSYLVANIA

THE INTERNATIONAL FINANCIAL POSITION OF THE UNITED STATES

RALPH A. YOUNG

A THESIS

IN ECONOMICS

PRESENTED TO THE FACULTY OF THE GRADUATE SCHOOL IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF DOCTOR OF PHILOSOPHY

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PREFACE

IT IS generally recognized that the World War marked a significant turning point in the position of the United States in international affairs. The part which destiny compelled the United States to play in this great disturbance of normal international relationships accelerated and concentrated within a few years changes in the international political and economic position of this country which might naturally have developed in the course of time but otherwise would have taken many years to bring to fruition.

In the economic sphere, especially, the rapid alteration and extension of the international business relations of the United States has steadily and with growing insistence impressed itself upon the attention of thoughtful and forward-looking American business men in the years since the war. It has been recognized with increasing clearness that the new international position of this country in the world economy has carried and will carry with it important and far-reaching consequences for our financial system, our industrial structure and our trade relations. These years have brought with them significant developments in domestic banking conditions, vast changes in the organization and methods of domestic industry and commerce, and radical departures in immigration and foreign trade policies which have wide implications for the future of international relations as well as the national prosperity. Yet the changes have been so rapid and pervasive that their significance is not generally realized. A great task of investigation and enlightenment lies before the American business community in order that it may have that clear and broad understanding of these problems needed to guide it wisely in the process of adjustment which will inevitably take place through many years to come.

In recognition of this need, the National Industrial Conference Board in 1925 turned its attention to one aspect of the international economic relations of the United States, which was then uppermost in the public mind, that of the nature and significance for American industry and trade of

the huge structure of intergovernmental indebtedness left by the war. In its study entitled "The Inter-Ally Debts and the United States," published in that year, the Conference Board undertook to analyze the circumstances and origin of these debts, their relation to the fiscal situation in the various countries affected and the relation of their liquidation, on the basis then contemplated, to the industry and trade of this and other countries. Since that time, of course, the factors involved in this specific problem have been greatly altered, vastly multiplied and made much more complex through the process of negotiation of intergovernmental debt funding agreements, through the establishment of the Dawes Reparations Plan and its replacement by a new reparations settlement this year and, finally, what is of far greater importance, the extension of private American financial interests in foreign countries. The problem of intergovernmental indebtedness has thus been merged into the broader problem of the international financial relations of the United States in their many aspects. The need today, therefore, is for a clear and comprehensive view of the international financial position of this country after the lapse of ten years of post-war development and readjustment in our world economic relations.

The purpose of the present volume is to provide the basis for such a broad view and clear understanding through a careful analysis of the significant features of the development of American international financial relations prior to, during and since the World War, with special emphasis upon the bearing of this development upon American trade relations and domestic banking conditions. Although the interest of this study is primarily financial, it is recognized that in the final analysis the financial aspect of international relations is a reflection or an expression of the international exchange of goods and services which constitutes the business life of the world and finally rests upon and reflects the development of productive industry. For this reason the present study looks forward to, and prepares the way for, a separate and detailed analysis of American export and import trade and, separately, of changes in industrial organization in the United States and other industrial nations.

In so vast and complex a field of problems it is inevitable that the conclusions of any study must be tentative and subject to change and qualification with the passage of time and the pressure of events. But the method of all science is a process of progress from the known to the unknown; and it is only in the light of the lessons of past experience that the future can be revealed. It is hoped, therefore, that the retrospective view of the development of the international economic relations of the United States, which this and other contemplated studies are designed to provide, will afford some basis upon which the American business community may more soundly and effectively prepare itself for what the future may bring.

In the preparation of this study the Conference Board has greatly benefited by the cooperation and suggestions of its Advisory Committee on International Economic Problems, composed of men of special knowledge and broad experience in this field, to whom the Conference Board wishes to express its indebtedness, viz.:

Fred I. Kent, Director, Bankers Trust Company, New York City, *Committee Chairman.*
A. Farwell Bemis, Chairman, Bemis Bros. Bag Company, Boston, Mass.
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In the preparation of its studies, the National Industrial Conference Board avails itself of the experience and judgment of the business executives who compose its membership, and of recognized authorities in special fields, in addition to the scientific knowledge and equipment of its Research Staff. The publications of the Board thus finally represent the result of scientific investigation and broad business experience, and the conclusions expressed therein are those of the Conference Board as a body.

This study was made and the present volume prepared by Mr. Ralph A. Young of the Conference Board's Research Staff, under the general supervision of the Board's Staff Economic Council and the guidance of Mr. Virgil Jordan, Chief Economist of the Conference Board.

MAGNUS W. ALEXANDER,
President.

New York City
May, 1929

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THE INTERNATIONAL FINANCIAL POSITION OF THE UNITED STATES

CHAPTER I

DOMESTIC VS. INTERNATIONAL FINANCE

INTERNATIONAL economic and financial relations play a distinctive, though rarely appreciated, rôle in the development of any country. Influences originating in such relations often materially modify forces which seem purely domestic in character, or sometimes set in motion new domestic economic forces. Conversely, international relations are frequently tempered by factors of domestic origin and in many instances are really the consequences of the latter. The economic conditions prevailing at any stage in a nation's growth are thus the consequence of both external and internal influences. The latter are subtly interwoven and hence very difficult to disentangle.

The broad problem with which this study is concerned involves the recent international financial relations of the United States. These constitute one of the most noteworthy aspects of the national economic development, of profound significance to the entire business organization of the country. More particularly, therefore, the problem of the study concerns the effects of international financial relations upon the domestic financial structure and upon American industry and trade. Ultimately, the purpose is to consider the possible character of future international financial relations, in so far as they may be forejudged.

Within a very short period the United States has become, in an astonishing measure, the international creditor of many countries, partly because of foreign property investments before the World War, but mainly because of long-term credit advances made during the war and the extensive invest-

ments made since. On the other hand, as will be seen, foreign investments and deposits in the United States, which were materially reduced from 1914 to 1919, have more recently been restored. Before the war, America was predominantly an international debtor; today she is predominantly an international creditor. How can this abrupt shift be explained? Does it mean that the United States has arrived at an advanced economic stage, where large capital advances to other countries would normally be expected? Unusual conditions and demands explain the change in our international financial position during the war period, but what are the causes and significance of the post-war expansion of America's creditor position?

America's International Financial Relations in the Past

In order to answer these major questions, it is obviously necessary to have some understanding of the general nature and tendency of America's international economic and financial relations in the past. Of these it would be impossible, within the limits of this study, to attempt more than a summary analysis, not only because adequate information is lacking but also because the investigation must be restricted in its scope. A certain knowledge of the past is required, however, to supply the background for a correct perspective of the country's present creditor position and for a proper evaluation of its future.

America as an International Debtor

From the earliest existence of the United States as a national entity until 1916, America was a debtor country, although from the end of the nineteenth century American investments abroad, of which there had always been a few, began to increase. In the light of the historical material available and the space which can be devoted to it, there are several intimately related questions in this connection which require treatment. For example, what was the nature of the country's international business dealings while a debtor; and what was the importance of the international transactions involving transfers of capital funds compared

with those concerned with payments for merchandise and services?

Other questions are connected with these. To what extent was America dependent upon foreign capital at various periods in her development? From what sources did this capital come? Of what importance was it in contributing to the nation's economic growth? Finally, how may the appearance and expansion of American foreign investments be broadly explained?

Such questions are both pertinent and timely, and the answers to them, given in Chapter II, are largely factual. International debtor-creditor contracts are not new. The United States as an economic unit has always been enmeshed in a network of them. International financial relations of today may be far more complex than those of the past; they may involve far greater numerical values; and the order of the relationships may be entirely reversed; but relatively they may be of no greater economic importance. To appraise the significance of the contemporary international financial position of the United States, with an eye to the future, demands an understanding of her position at various periods in the past.

America's Transition to an International Creditor Position

At the outbreak of the World War, the United States was an international debtor to the sum of roughly $5.5 billions and a creditor to the amount of about $2.5 billions. Circumstances suddenly forced the nation into the forefront as a lending center. Countries formerly in the lead as suppliers of capital were embroiled in conflict. Their financial markets were closed abruptly and they in turn became borrowers. Neutrals were thereby forced to enter other markets for their capital needs, and notably, that of the United States. This briefly describes the foreign demand for American capital until the United States Government formally declared war. After that time, through government efforts, this demand was restricted to associated belligerent nations and was satisfied chiefly by intergovernmental loans.

The mere assertion, readily acknowledged, that the extraordinary pressure of foreign capital demands arising from

the world conflict were paramount in the transformation of the country from a debtor to a creditor position does not convey a full understanding of the nature and extent of the shift. It would be impossible to grasp the full significance of the nation's international financial relations in recent years without a fairly definite conception of the character of those relations during the short span of the World War. It is important to know what were the conspicuous features of the international transactions of the period and what was the actual importance of capital movements among them. What was the approximate international creditor and debtor position at the end of the period? Finally, how was the United States able to meet the unusual foreign capital demands which arose? This study does not pretend to answer these questions completely, but in Chapter III it does endeavor to supply sufficient material to answer them briefly. Their importance for an intelligent consideration of the developments which subsequently took place thoroughly justifies a wider treatment than is warranted for the pre-war period.

America's Recent International Financial Relations

Just as some knowledge of America's international financial relations during the war period is fundamental to an understanding of the immediately succeeding period, so a thorough comprehension of factors more recently involved is requisite to any thoughtful contemplation of the future. Here the heart of the whole study is approached, necessitating both a more intensive and a broader analysis of the interrelationship between international and domestic finance.

The Nature of International Capital Movements

Wide publicity has been given to every annual compilation of foreign loan offerings in the United States in recent years. Often they have been related to the familiar surplus of merchandise exports over imports. These security flotations have represented, it has been alleged, an export of American capital funds and the export balances of merchandise have constituted the basic form which they assumed and by which they were transferred. Such reasoning may be logical, but it cannot be accepted uncritically. Exports of

capital are much more complex in their essential composition than can be indicated by recourse to figures of foreign security offerings. They do not lend themselves to measurement by so simple a gauge. Furthermore, they constitute but one in the multiplicity of influences causally connected with the export balance of merchandise. The whole process of international capital movements is inextricably ramified, and no unstudied explanation will suffice.

No description of international capital movements can proceed very far without a firmly established concept of what such movements really are. The economist formally defines capital as a stock of material economic wealth. But such a definition will not be satisfactory here because it is possible for an importation of a foreign security to take place, and for the funds received from its sale to be transferred abroad without any immediate diminution in the stock of material economic wealth through exportation. What is transferred are the funds or purchasing power secured from the sale of the security, and such purchasing power can be transferred only because an equivalent volume of it is flowing in the opposite direction.

The whole process of international exchange is a money process on the surface with not only goods but services and property equities moving beneath. When more funds are flowing in one direction than in the other under gold standard conditions, to be sure, forces are set into operation to increase the underlying movements of economic values. Though on the surface the process is pecuniary and must be measured in terms of money, the problem can be understood only in terms of international movements of values and purchasing power.

Capital exports, therefore, must be defined as exports of purchasing power resulting from the acquisition of foreign securities or properties. Other outward capital payments include those for interest or dividends to foreigners for their American investments, repayment to foreigners of the principal of investments resold to Americans, or the redemption of bonds and notes which have matured or have been amortized. Capital imports and other inward payments on capital account are merely of an opposite nature. A distinction can be made between capital payments which may be identified with long-

term capital transactions and those which may be distinguished as related to short-term capital transactions. That is to say, funds having to do in any way with investments in securities or property equities possessing qualities of permanence owing to the durable nature of the underlying values or the length of time indicated by contract for their existence, may be described as payments on long-term capital account. On the other hand, payments having to do in any way with credits, securities or property equities[1] which are fundamentally temporary in character may be distinguished as payments on short-term capital account.

Hard and fast lines between these two broadly identifiable classes of capital payments cannot be drawn. They necessarily merge and overlap. Yet such a distinction facilitates the statistical measurement of the aggregate of America's recent international capital relations with foreign countries as a group, and provides a more precise view of their actual make-up than is possible in the case of the past.

Recent International Capital Migrations

The problem, therefore, first takes the form of both qualitative and quantitative analysis. In other words, what has been the character of the migrations of long-term capital funds in recent years? American long-term capital funds have been exported not only as a result of new foreign security offerings in the United States, but also because of American purchases of foreign securities in foreign security markets. Moreover, they have gone abroad for the direct acquisition of foreign properties. There have also been interest and dividend payments to foreigners upon their investments in America as well as some repayment of principal of their investments which have made for capital payment exports. On the other hand, foreigners have purchased American securities in the domestic markets, although new American security offerings on foreign markets have virtually disappeared, and these have led to capital fund imports. But inward capital payments, broadly defined, have come as well from interest, dividend and principal repayment requirements upon previous foreign investments of Americans.

[1] Deposits, loans, acceptances and other short-term investments and credits.

A number of specific questions arise. What has been the actual amount of each type of capital payment exported and imported? To what extent has the major exportation of funds been the consequence of new foreign securities purchased by Americans; where have these securities come from; and how have they been absorbed? In what measure have exports and imports of funds resulted from the international exchange of old or outstanding securities? What has been the course of exports and imports of capital funds for the purpose of directly acquiring properties? Finally, what has been the volume of payments on capital account for interest, dividend, and principal repayment purposes, especially the volume of such imports?

These various questions, which are discussed in Chapter IV, lead up to and are part of a larger question answered in the same chapter. Has the United States as a unit in recent years really been exporting long-term capital funds on a large scale for foreign investment; or has she, on the whole, merely been reinvesting the interest, dividends and principal repayment sums due each year from previous investments? Obviously, this is a question of crucial importance, for upon it hinges the validity of many popular notions regarding the country's international financial position and of many allegations that foreign investment has been unduly depriving American industry of an adequate capital supply. While it can be partially answered by balancing all payments on long-term capital account, it ultimately depends as well upon the movement of all short-term capital payments; in other words, upon the entire net movement of all capital funds. Questions regarding the character and volume of all short-term capital payments, therefore, are preliminary to final conclusions. They are likewise treated in Chapter IV.

Capital Movements and the Balance of Merchandise and Service Trade

The questions just discussed are aimed at a clearer understanding of the realities of the country's international financial relations. They do not concern directly the connection of these relations with the balance of merchandise and service trade. Notwithstanding, this is a problem which de-

mands solution. It has already been noted that the export balance of merchandise which has regularly featured our international commerce has been attributed to the flotations of new foreign securities in the United States, and this causal association was challenged. It was insisted, moreover, that the whole matter of capital movements required examination before any explanation of their affinity with the balance of merchandise trade could be offered.

Further questions, therefore, require attention. For instance, what has been the character of America's international business dealings viewed as a whole? What has been the relative importance of those concerned with merchandise, with services, with securities, and with other capital transactions? What relationship can be traced between them? Why has it been possible for the United States to create regularly a net export balance of merchandise? What, exactly, was the balance of so-called service trade? When the balances of merchandise and service trade are combined, has it been true that there has been regularly an export balance? How has the balance of all merchandise and service trade compared with the balance of capital movements? The essential facts which illuminate these questions are set forth in Chapter V.

The Present International Financial Position of the United States

In order to summarize America's international financial relations in recent years, the entire debtor-creditor situation resulting from them must be outlined as it stands at present. What, as nearly as can be determined, is the contemporary long-term creditor status of the country? The long-term debtor position? Likewise, what is the short-term debtor-creditor condition? And what is the approximate net-creditor balance? Finally, what is the geographic distribution of these international assets and liabilities?

International and Domestic Finance

Two general facts are well known regarding America's recent international financial relations. In the first place,

whatever the character of all inward capital payments, capital fund exports have taken place, and chiefly for long-term foreign investment. In the second place, America has been able, because of this outflow, greatly to extend her international creditor position since the close of the war, in spite of the fact that a portion of the debts owed the United States Government by foreign governments were virtually cancelled in the refunding process to which they were subjected. Hence, all of the questions just raised hark back to the basic problem suggested earlier: Was the United States able to enlarge her international creditor position because the swift changes wrought by the war had carried her to the heights of industrial maturity where low capital returns and limited opportunities naturally compelled the export of funds abroad for profitable employment? Or was this creditor expansion the result of the operation of extraordinary forces which made foreign employment of capital attractive?

International Influences on American Finance

To deal with this primary problem necessitates a consideration of certain phases of the nation's financial structure. Monetary disturbances characterized foreign conditions throughout the post-war period, particularly until 1925. The United States alone maintained a currency and credit system based on gold. Gold, accordingly, early tended to concentrate within American boundaries. The question which first arises, therefore, concerns the reasons for this gold concentration, the sources from which it came, and the extent to which it was subsequently re-exported. In other words, it involves a careful analysis of the rôle of gold movements in the country's international financial relations.

Other questions of paramount significance emerge from it. What tangible effects did this gold concentration have upon the commercial credit base of the country, which consists of gold and the credit of Federal Reserve banks in turn based on gold? To what degree did commercial bank credit expand? In what measure was gold the cause of this expansion; in what measure was it based upon Federal Reserve credit; and in what measure was it due to the legal reserve requirements of the banking system?

Again, what channels provided an outlet for the increased credit? Was it used in production or was it absorbed in the financial operations of floating new securities and turning over old ones? Did it affect primarily money market conditions and was it largely the basis of America's capacity to extend foreign loans? Finally, what effects did this enlarged credit purchasing power exert upon the price level?

Such an array of questions is at first glance forbidding, but they have to do with very fundamental realities. Highly technical aspects of the country's economic structure are involved, yet the factual material bearing upon them is readily subject to scientific analysis and easily followed. This material is presented in Chapter VI.

International Influences upon Federal Reserve Operation

Since Federal Reserve credit based on gold forms the commercial credit base of the country, it is always a factor to be reckoned with, according as there is more or less of it in use. Hence, in Chapter VII, it is necessary to inquire into the policies which have been followed by Federal Reserve banks with regard to Reserve credit in the period under survey, for in some degree the employment of that credit must respond to such policies as they are embodied in specific operations. To what extent did Federal Reserve banks promote its use and to what extent did they conserve its use? On the other hand, to what extent was the employment of Federal Reserve credit dependent upon the needs of commercial banks in order to meet the demands of industry, trade and finance?

The essential facts upon which these questions hinge may be grouped into a twofold classification. First, there are the data showing the actual nature of Federal Reserve policies and operations and their evident effects upon the nation's credit structure. Second, there are the data evidencing the basic considerations which Federal Reserve authorities took into account in pursuing them, particularly the international considerations. The former may be statistically supported, but the latter must be garnered from published statements regarding Federal Reserve policy. Judgment has been exercised in selecting from these statements, but enough has been included to allay doubts of adequacy. The purpose is not to

analyze Federal Reserve policies critically, but to observe them objectively and scientifically in order to evaluate their broad significance in the complex financial events which have contributed to the expansion of America's international creditor position. As a result of this analysis it will be seen that the central banking institution of any country, through its policies and operations, profoundly affects the international and domestic financial developments of the national economy.

The Intergovernmental Debts Again

The most noteworthy item on America's international balance sheet at the close of the war was that for the governmental debts owed the United States Treasury. They were but one phase of a larger problem of intergovernmental indebtedness resulting from the war, a problem which has subsequently been the center of a great deal of political and ethical controversy, as well as diplomatic negotiation. A previous study by the National Industrial Conference Board, "*The Inter-Ally Debts and the United States*" (1925), was devoted to a discussion of the various aspects of the war debts as they stood at that date.

Naturally, with the passage of time the complexion of the problem has changed. So far as the United States is concerned, the debts owed her, with one important exception,[1] have been technically covered by funding agreements which effectively cancelled a portion of the original obligations. Even with these reductions, however, they are today in the aggregate a conspicuous figure among the nation's international assets. Furthermore, they continue to assume a prominent rôle in current discussion, because many aspects of the broader problem of intergovernmental indebtedness inherited from the war remain unsettled. Hence, it is highly imperative that their present status be reviewed, and this is done in Chapter VIII.

From the standpoint of this study, which is concerned ultimately with the future course of events, it would be impractical to engage in other than a factual exposition of the inter-ally

[1] Russia.

debts. Whether the American debt settlements have been wise or just, therefore, is a matter beyond the purview of the treatment. The extent to which they have become enmeshed in the wider considerations of war debt adjustments, however, is a matter of utmost importance, for upon this interrelationship will depend any sweeping changes in their essential composition and manner of settlement.

The problem of which they are a part, consequently, must first be viewed as a whole. In brief, what is the present statistical position of the intergovernmental debts arising out of the war, both exclusive and inclusive of the reparations obligations of Central Powers? Naturally, such a view must be partly conjectural because certain of the intergovernmental debts have not been readjusted and a final fixation of the reparations debt of Germany awaits the acceptance of the report of the International Commission of Financial Experts by the creditor governments concerned.

Germany's reparations creditors, however, are also America's debtors. Another phase of the problem therefore is inextricably interwoven with these policies. That is to say, in what measure have the policies of Germany's reparations creditors been related to the settlements which they have made to cover war debts owed the United States? Hence, the discussion must turn to the American debt settlements. What has been the nature of the policies followed by the United States Government with regard to them? And what exactly have been the outstanding features of the resulting funding agreements which have been reached?

All of these questions converge upon a definite problem of the future relationship of the debts owed to the United States and other existing intergovernmental debts arising out of the war, and particularly the reparations debt of Germany. It is probable that the commercialization of a portion of Germany's reparations debt will be effected through a public offering of German bonds upon world financial markets. The funds received from this sale, it appears, would be applied immediately to a reduction of claims of creditor governments. Could they, in turn be applied to reduce debts owed the United States Government? Is it probable that they would be so applied? Would American debt policy

appear to preclude this possible arrangement? Would American debt policy seem to admit even a favorable attitude towards it?

If such a general adjustment of the debts resulting from the war were to take place, a further problem would arise, which is considered in Chapter X. Upon what markets of the world would such a bond issue be floated? To what extent would they be floated in the United States? Assuming that some agreement could be reached for applying the funds received to the liquidation of war debts owed the United States Government, would the accompanying transfer of funds to the United States be disturbing to American finance, and consequently to American commerce and industry? In short, what would be the international impact of such a plan upon the domestic financial structure?

The Problem of the Future

Whatever the factors which have combined to build up the present international creditor position of the United States, there remains the question of the future. Will the United States continue to enlarge this position, or will it gradually be liquidated and the old relationship of a debtor country be reestablished? Though this appears improbable, it is certain that there will regularly take place substantial movements of capital funds across the borders of the country. The problem of the future, accordingly, is concerned with the possible volume, and even more, with the economic and financial consequences of these movements of capital funds.

Obviously, there is no scientific way of evaluating their character and volume except by recourse to the past. A large element of conjecture and speculation is necessarily involved. Nevertheless, it is highly important that the attempt be made to project the results of the study into the future. No country could establish itself as a creditor to the extent and with the rapidity that the United States has without occasioning serious and thoughtful regard for the approaching years. The general welfare of the community is definitely tied up with this creditor position, and national economic policies must be formulated with full regard for it.

Before such a treatment can proceed very far, a number of questions must be dealt with which relate to the broader consequences of international capital movements. The movements of capital payments are always the result of innumerable independent transactions of individuals, corporations and governments which are not necessarily related to transactions involving international trade in goods and services. Although exports and imports of these funds may by chance balance, or although they may at times be closely associated with trade in goods and services, they do not of necessity balance, nor are they of necessity so related. Hence, a nation is usually experiencing either a net inflow or a net outflow of all capital payments. Temporarily, credit advances may fill the breach to offset a lack of balance, but if the one-sided movement persists, far-reaching consequences accompanying the operation of the gold standard mechanism may take place which eventually may affect the flow of merchandise and services.

Whether the United States has attained a creditor position, as Great Britain has, where a net inflow of payments on capital account results in each year from investment service receipts and capital repayment of previous investment, is problematical. Conceivably, she could readily extend foreign loans so freely in the future that a new outflow of all capital funds would occur from year to year. On the other hand, it is as easily conceivable that an inflow of funds may endure because of a reduction of capital exports and the inflow of funds to meet the service charges of previous investments.

On the basis of known facts of the modern gold standard mechanism, modified as it is by central banking control, and of the wider effects of capital movements, how would a persisting net export of all capital payments for the country as a whole be reflected in American trade? Conversely, how would a continuing net import of all capital payments for the country as a whole be reflected in American trade? These matters are fully discussed in Chapter IX.

Having reached conclusions upon them, the final step is to consider in Chapter X just what the possibilities are for either one of these two developments to appear? In other words, judging from the past, just what are the possibilities

for the future movement of funds in and out of the country on capital account? What of the flow of all long-term capital funds? What of short-term capital funds? Necessarily capital movements in particular years cannot be forecast, but what of the trends?

Other questions closely associated with those mentioned above logically follow. What would be the broader economic and financial effects of the probable capital flow? How might it influence movements of gold, and central banking operations connected with them? What might be the consequences to the nation's credit structure? Would the Federal Reserve authorities be in a position to control any foreseeable impact? How might this capital flow affect international trade in merchandise and services?

In the end, all these questions break up into separate questions regarding America's future international financial relations with particular areas. After all, dealings in foreign trade and finance are more specific and localized than can be shown by viewing the movement of funds as a whole. Moreover, it is not likely that the United States will ever experience a net export of capital payments to all countries at the same time or a net import of capital payments from all at once. What, then, can be expected in a general way from our knowledge of the present course of events in these areas and the present status of American financial relations with them? What influences might be felt in the separate channels of trade and commerce?

While this study is concerned primarily with the complex interplay of international and domestic financial forces, it is obvious that many other factors besides capital movements will be important in the future international business dealings of the United States. In fact, capital movements will in many cases be determined by transactions which have to do with merchandise and services, or at least will be a reflection of them. Much will depend, consequently, upon industrial and commercial tendencies in foreign countries relative to those in the United States. It is necessary to ask, therefore, just what the nature of these present tendencies are.

To a large extent they may be revealed by a careful study of the character and direction of America's foreign trade,

which is the major problem of a projected study by the National Industrial Conference Board. From another point of view, however, they are much too wide in scope to be so disclosed. Recent studies by the National Industrial Conference Board on world economic conditions contribute materially to an understanding of other phases of the problems, and a study in preparation analyzing recent industrial tendencies in Europe, America's chief debtor area, will throw still further light upon it.

Finally, international capital movements in the future will be affected by the political considerations inevitably involved in national commercial policies and problems of international peace. No analysis could be complete without adequately heeding them, yet the magnitude of the task of weaving them into the present study and the lurking entanglements of national sentiment and bias precludes their fruitful consideration here. Nevertheless, in so far as they may pivot upon fundamental economic and financial factors, this study may add to a clearer understanding of their vital and significant rôle.

CHAPTER II

AMERICAN INTERNATIONAL FINANCIAL RELATIONS AS A DEBTOR

IN ORDER to comprehend more fully the nature of the international financial influences which have affected American economic developments in recent years, some knowledge of those influences in the past is required. It is the purpose of this chapter to supply the requisite background. The aim is not to retrace exhaustively the history of America's entire world economic relations, but to summarize for the purpose of perspective and contrast, as an introduction to the material which follows, the evolution of her international financial position.

The Statistical Data

Considerable light may be thrown upon the nature of the changing international financial relations of the United States by the accompanying statistical data which are generally but not precisely descriptive of the nation's balance of international payments for selected periods. The available balance of international payments statements for these periods are abridged in Table 1 giving annual averages for the major classes of estimated credit and debit items reflecting payments in and out of the country. The percentage distribution of the items is given in Table 2 to show the relative importance of each. Table 3 further supplements Table 1, by showing the average net balances. The division of the periods accords with the outstanding trade and financial developments from an international point of view.

The most conspicuous aspect of America's international business transactions in the past was the predominance of payments for merchandise, shown in Table 2. While the most important of all causes for the flow of payments or funds across American boundaries in the century and half

before 1914, there was never an actual equivalence of payments to foreigners for merchandise imports or payments from foreigners for merchandise exports.

Table 1: Summary of the Estimated Balance of International Payments of the United States, 1821–1914

(Source: Harvard Committee on Economic Research,[1] Arranged by the National Industrial Conference Board)

(In millions of dollars)

Annual Average (Fiscal Years)	Credits, Reflecting Payments into the United States						
	Total	Merchandise Exports	Gold Exports	Security Exports[2]	Interest Payments	Service Exports[3]	Miscellaneous and Net Unaccounted for[4]
1821–1837	109.0	81.7	6.3[5]	7.4	..	13.2	0.5
1838–1849	152.2	116.0	6.5[5]	3.3	..	25.9	0.5
1850–1873	432.1	274.3	59.4[5]	41.7	..	40.5	16.2
1874–1895	873.3	783.2	36.7	45.4	..	6.7	1.3
1896–1914	1917.5	1691.0	64.1	105.2	40.0	4.5	0.7
	Debits Reflecting Payment out of the United States						
	Total	Merchandise Imports	Gold Imports	Security Imports	Interest Payments	Service Imports[6]	Miscellaneous and Net Unaccounted for[7]
1821–1837	109.0	92.6	8.5[5]	..	3.5	1.1	3.3
1838–1849	152.2	113.2	9.5[5]	..	12.0	10.4	7.1
1850–1873	432.1	338.4	13.6[5]	..	37.6	42.5	..
1874–1895	873.3	670.0	31.2	..	85.0	87.1	..
1896–1914	1917.5	1203.4	73.3	52.6	200.0	358.2	30.0

[1] C. J. Bullock, J. H. Williams, and R. S. Tucker, "The Balance of Trade of the United States." *Review of Economic Statistics*, Vol. I, July, 1919.

[2] The import of capital involves the export of securities, i. e., stocks or proprietorship equities, bonds, mortgages and other investments representing long-time credit extension.

[3] *Service exports* includes freights payable to the United States and funds brought by immigrants.

[4] *Miscellaneous* includes the sale of ships from 1821 to 1823. *Net unaccounted for* is grouped here with miscellaneous, and is a balancing item having no special significance. It is sometimes regarded, however, as representing unfunded credits, bank balances and so on. This is more true of estimates of balances made the last few years than these early ones which are only very rough approximates.

[5] Up to 1873, silver and gold are given together; thereafter, the figure is for gold alone.

[6] *Service imports* include freights paid by Americans for foreign shipping, expenditures of American tourists abroad, and immigrant remittances.

[7] On the debit side, "miscellaneous" includes the average under-valuation of the pound sterling from 1821 to 1837, although the pound was not under-valued after 1832; the average Mexican War and indemnity payments from 1838–1849, although these payments were concentrated in the last few years of the period. *Net unaccounted for* is combined with it as on the credit side.

Table 2: Percentage Distribution of the Major Classes of Items in the Estimated Balance of International Payments of the United States, 1821–1914

(Source: Harvard Committee on Economic Research,[1] Computed by the National Industrial Conference Board)

Annual Average (Fiscal Years)	Credits, Reflecting Payments into the United States						
	Total	Merchandise Exports	Gold Exports	Security Exports	Interest Payments	Service Exports	Miscellaneous and Net Unaccounted for
	%	%	%	%	%	%	%
1821–1837	100	75.0	5.8	6.7	..	12.1	0.4
1838–1849	100	76.2	4.3	2.2	..	17.0	0.3
1850–1873	100	63.5	13.7	9.7	..	9.4	3.7
1874–1895	100	89.7	4.2	5.2	..	0.8	0.1
1896–1914	100	88.2	3.3	5.5	2.1	0.2	0.7
	Debits, Reflecting Payments out of the United States						
	Total	Merchandise Imports	Gold Exports	Security Exports	Interest Payments	Service Exports	Miscellaneous and Net Unaccounted for
	%	%	%	%	%	%	%
1821–1837	100	84.9	7.8	..	3.2	1.0	3.1
1838–1849	100	74.4	6.2	..	7.9	6.9	4.7
1850–1873	100	78.3	3.1	..	8.7	9.9	..
1874–1895	100	76.7	3.6	..	9.7	10.0	..
1896–1914	100	62.8	3.8	2.7	10.4	18.7	1.6

[1] See Table 1.

Table 3: Average Net Balance of the Major Classes of Items in the International Balance of Payments of the United States, 1821–1914

(Credit balance +, and debit balance −, or net payments into the United States +, and net payments out of the United States −)

(Source: Harvard Committee on Economic Research,[1] Arranged by the National Industrial Conference Board)
(In millions of dollars)

Annual Average (Fiscal Years)	Merchandise	Gold	Securities	Interest Payments	Service Payments	Miscellaneous	Net Unaccounted for
1821–1837	−10.9	−2.2	+7.4	−3.5	+11.1	−1.2	−1.6
1838–1849	+2.8	−3.0	+3.3	−12.0	+15.5	−1.6	−5.0
1850–1873	−64.1	+45.8	+41.7	−37.6	−2.0	+2.7	+13.5
1874–1895	+113.2	+5.5	+45.4	−85.0	−80.4	..	+1.3
1896–1914	+487.6	−9.2	+52.6	−160.0	−353.7	−28.4	+12.7

[1] See Table 1.

In fact, save for four years in the late eighteen twenties, six years between 1838 and 1847 and the years 1850 and 1862, the net merchandise balance was regularly on the import side until 1873. The amount of the balances, however, was never large until after 1850. After 1873, excepting the years 1875, 1888, 1889 and 1893, notable excesses of merchandise exports over imports appeared.

The primary objective of the following analysis, consequently, will be to indicate the broad relationship these trade balances have with international movements of capital payments and payments for services. The wider effects of the migration of capital funds will be dealt with only in a general way, both because the information is meagre and because it represents a digression from the main problem. At a later stage the post-war international capital movements will be analyzed in some detail and their relation to the domestic business economy traced.

The Period Before 1821

To amplify the statistical data, recourse must be had to historical annals. Prior to 1821, for which period no balance-of-payment statement is available, the United States had an average annual adverse balance of merchandise trade, or an excess of imports over exports, of approximately $18 millions yearly, according to government figures. This excess represented largely payments to Americans for shipping services, but it also covered a certain amount of foreign capital investments. To the extent that this was true, exports of all kinds, goods and services, went partly for the payment of interest,[1] dividends and capital repayment.

This continent had sought and obtained capital from Europe practically from the day of its first settlement, by means of which sugar, tobacco and cotton plantations, as well as mercantile projects, were developed. These investments were largely made by merchants and traders, while other capital was brought by settlers. Although few corporation ventures proved to be profitable, the investment opportunities appeared so inviting, according to one author-

[1] See Bullock, Williams and Tucker, *op. cit.*, pp. 215–7.

ity,[1] that only the collapse, in 1720, of the South Sea bubble and the Mississippi scheme, temporarily effecting a great setback to European foreign investments, prevented the American colonies from being overwhelmed with interest charges. Even so the colonies labored under a heavy load of capital debts at the time of the outbreak of the Revolution.[2] These, however, were largely wiped out by confiscation and bankruptcy during the period of the conflict, leaving the main external indebtedness to consist of the Federal Government debts to France, Holland and Spain.[3]

The subsequent rapid development of the United States was accompanied by a considerable immigration of capital funds from Holland, and to some extent from England, a movement doubtless stimulated by unsettled political conditions in Europe.[4] Alexander Hamilton in his famous *Report on Manufactures* was clearly aware of the important part foreign capital had played in increasing American funds, and enabling improvements in agriculture, manufacturing and transportation enterprises.[5]

By 1807, a large portion of the national debt was held in Europe. The capital inflow was momentarily halted by the War of 1812, but the ten years following 1815 witnessed enormous receipts of capital funds from foreign sources.[6] More and more, America turned from the Dutch investment market to the English. In 1800, no American securities were quoted on the "official list" of the London Stock Exchange. By 1825, nine issues of United States government bonds, a number of state and city bonds, and United States Bank shares were quoted on this exchange.[7]

[1] N. T. Bacon, "America's International Indebtedness," *Yale Review*, November, 1900, p. 279.

[2] Bacon, *op. cit.*, p. 279.

[3] *Idem.*, and D. R. Dewey, "The Financial History of the United States," New York, 1922, p. 47. Toward the end of the 18th century a large portion of these securities crossed the channel to England. See H. L. Jenks, "The Migration of British Capital before 1875," New York, 1927, pp. 65–6.

[4] Bacon, *op. cit.*, p. 280 and C. K. Hobson, "The Export of Capital," London, 1911, p. 89.

[5] Quoted in full in F. W. Taussig, "State Papers and Speeches on the Tariff," Cambridge, Mass., 1892. See especially pp. 38–41.

[6] Hobson, *op. cit.*, p. 110.

[7] Sir George Paish, "The Trade Balance of the United States," National Monetary Commission, Washington, 1910, p. 173.

Thus it appears that the regular excess of imports over exports in this period was offset in great part by the exportation of American securities and property titles. Shipping services rendered foreigners by American vessels, already mentioned, was another balancing factor. Still others included the sale of ships, duties retained on re-exportable goods, indemnities and losses by foreign creditors.[1]

The Periods from 1821 to 1837 and from 1838 to 1849

Further exports of securities and importations of European capital funds took place in the seventeen years following 1820, averaging $74 millions per year. These, together with shipping services rendered foreigners by American vessels, account for the average excess of imports which obtained. Although the United States had paid off its public debt by 1835, the debts of states had undergone a tremendous increase and many of the bonds representing them found their way to Europe. Other capital funds of foreigners had gone into commercial and transportation ventures.[2] The first record of a foreign railway loan flotation was in 1836 when Baring Brothers purchased $2 millions of a Baltimore and Ohio Railway issue.[3] By 1837, Europe was said to hold between $150 millions and $200 millions of claims to American wealth due to her capital advances.[4]

The panic of 1837 and the further reaction of 1839 brought foreign investment almost to an abrupt termination, restricting American purchasing power in foreign markets. Imports for a few years ceased to exceed exports.[5] Some investments were withdrawn but not all; the total remaining was said to be as much as $166 millions in 1847, although one third of this was floating debt.[6] European investors remained skep-

[1] Bullock, Williams and Tucker, *op. cit.*, p. 217.

[2] Bullock, Williams and Tucker, *op. cit.*, p. 217.

[3] Paish, *op. cit.* Jenks, however, states that before 1836 over $90 millions had been invested in Northern canals and railways by the English alone, indicating an earlier interest by foreigners in railways. See his book, *op. cit.*, p. 75.

[4] Bullock, Williams and Tucker, *op. cit.*, p. 218.

[5] For a description of the Anglo-American aspects, see Jenks, *op. cit.*, pp. 85–89 and 100–8.

[6] An unsigned article, "The Panic and Financial Crisis of 1857," *Hunt's Merchants' Magazine*, December, 1857, p. 664.

tical and new loans were regarded with disfavor until the last few years preceding 1849. Nevertheless the average net balance of securities was on the export side to the sum of $3.3 millions. With the large amount of foreign investments remaining, interest payments continued to be heavy.

Other classes of payments entering importantly into the international dealings of the time consisted of those for freights, the sale of ships and immigrants' and tourists' remittances.[1] Grouped together as they are in Table 3 under service payments, they show an average net export balance of $15.5 millions, more than counterbalancing the interest payments made on the outstanding indebtedness.

The Period from 1850 to 1873

From 1850 to 1873, notable shifts occurred in America's international financial position, due successively to the discovery of gold in California, the Civil War, the speculative mania which followed the extravagant issues of paper currency, and the rapid expansion of railroad construction. The fifties experienced an influx of foreign investment funds, mainly from Great Britain and Holland, into railway securities, government bonds and, to some extent, into shares of land, mining and other ventures. Foreign investments were stopped temporarily by the outbreak of the Civil War, which was accompanied by a considerable return of American securities held abroad, a movement which, some authorities say, practically cleared the national ledger of foreign indebtedness.[2] Only German investors remained willing to take up United States bonds in the early period of the war.[3] As the

[1] Bullock, Williams and Tucker, *op. cit.*, p. 220.

[2] Hobson, *op. cit.*, p. 132, see also F. D. Graham, "International Trade Under Depreciated Paper. The United States, 1862–1879," *Quarterly Journal of Economics*, Vol. 36, Feb., 1922, p. 231. Professor Graham here includes a table of the estimated balance of international payments for the United States from 1860 to 1878. His estimate for the return of securities from abroad during the Civil War is $50 millions, while David A. Wells, as Special Commissioner of the Revenues, figured the return, perhaps excessively, at $200 millions. "House Executive Document," No. 27, 41st Congress, 2nd Session, p. XXII. The average annual amount of returned securities has not been entered in the average balance of international payments for the period. If it had been at a reasonable figure of $6.5 millions on the average, an offsetting addition to security exports would be necessary on the credit side. See also Bullock, Williams and Tucker, *op. cit.*, p. 223.

[3] Hobson, *op. cit.*, p. 132.

issue became clearer, English and French investors reentered the markets as purchasers of American securities.

After 1863, the exportation of securities from the United States proceeded on a scale greater than ever before, averaging in the following ten-year period about $104 millions annually,[1] and going mainly to British, Dutch and German investors, with the first group easily in the majority.[2] The large profits made by German investors in United States bonds were said to have caused them to cast a favorable eye on American railroad stocks and bonds as their loanable capital funds increased. They continued thereafter to be large investors in American securities.

Although the outflow of securities was the greatest in history, it was to a large extent offset from 1869 to 1873 by repayments of capital and interest at an annual rate of $77 millions. In such a period of foreign borrowing, outgoing payments of this character naturally underwent a marked growth. The major flow of capital payments was inward to about $36 millions, however, and because of it, imports of merchandise exceeded exports by unprecedented amounts. The rise in prices together with the increase in circulating purchasing power, which followed the outpouring of gold from the West, also stimulated imports relatively to exports.[3] The increased gold production likewise led to large exports of gold over imports, especially during the fifties, a movement which was accentuated in the sixties by the depreciation of the currency.[4]

It is an interesting fact that the period under discussion marks the beginning of the decline of the American merchant marine. Sales of ships were large during the war, and the following years saw few new ones built, freight services being performed more and more for Americans by foreigners. When tourist payments (a debit) and funds brought by immigrants (a credit) are grouped with freight payments, for

[1] Graham, *op. cit.*, p. 231.

[2] Hobson, *op. cit.*, p. 134.

[3] Import prices were regularly higher than export prices, tending to stimulate imports. All prices, of course, rose in the war period due to the issue of paper currency. So long as high domestic prices represented mere depreciation, they had no effect on imports. When they were high translated into terms of gold, however, they did have. This was the case. See Graham, *op. cit.*, pp. 253–4.

[4] *Ibid.*, p. 239.

the first time the net service balance was against the United States; that is, more payments went out for services than came in for them. Subsequent years were to see ever growing payments to foreigners for services rendered.

The Period from 1873 to 1896

After the world-wide commercial crisis of 1873, European investing virtually ceased, although the years 1874 and 1875 witnessed continued slight increases.[1] From 1876 to 1878, Europe actually returned large blocks of securities.[2] The business revival following 1879 was again accompanied by new foreign investments, concentrating particularly in railway securities, only to be brought to an end with further capital withdrawals from 1882 to 1885. But railway construction began afresh the next year with the foreign investment boom occurring in Europe.[3] Not only were the railways favored, but other American enterprises were recipients of foreign capital funds. Depression in Europe, following the English financial panic in 1890, led once more to a withdrawal of European funds lasting until 1896.[4]

The year 1874 is notable in the history of American international trade because of the overturn of the merchandise trade balance which occurred in that year. Exports exceeded imports thereafter in every year except 1875, 1888, 1889 and 1893, and exhibited a noteworthy growth in both agricultural and manufactured classes, with the former predominating. Aver-

[1] Probably the most important influence in the stoppage of foreign investment by Europe was the revelation of many scandals before the Royal Commission on the Stock Exchange. A large volume of defaults, it was found, had been experienced and borrowed funds had been flagrantly misapplied. See Hobson, *op. cit.*, p. 142, and Jenks, *op. cit.*, p. 292. The excesses of Jay Gould and his followers in the Erie, many of whose bonds were held abroad, and the defaulting of several American railroads were of special importance, too, as regards the American field for foreign investment. See W. Z. Ripley, "Railroads," New York, 1915, pp. 4–5.

[2] Graham, *op. cit.*, p. 231.

[3] A chairman of the London and Westminster bank is said to have stated at one of its annual meetings in the eighties that one-third of the advances made by his institution in that year were based upon American railway securities, Ripley, *op. cit.*, p. 5.

[4] See in this connection, Bullock, Williams and Tucker, *op. cit.*, pp. 225–6. The total withdrawals of foreign capital for the period amounted to around $600 millions or an annual average of $25 millions. As in the previous instance, this figure has not been included in the average annual balance of international payments statement for the period.

age exports for the period constituted a larger item in the balance of payments than ever before, while in the previous period they were the smallest proportion they had ever been. Although all prices were falling, the fact that paper import prices translated in terms of gold were high relative to export prices tended to discourage the buying of foreign goods and encouraged foreigners to buy American goods.[1] Gold exports declined on the average and were almost counterbalanced by gold imports induced by the large exportation of merchandise, despite the fact that the United States had normally become a gold producing and exporting nation.

Regarding the other transactions involving international transfers of cash, the heavy interest payments due Europe were absorbed by the excess of exports of commodities, gold and securities. This was also true of payments for services rendered Americans by foreigners which had grown greatly to exceed the receipts by Americans for services performed. The decline of the American merchant marine, the growing volume of American tourist expenditures abroad plus the millions of dollars returned home each year by immigrants, provide a sufficient explanation for this phenomenon.

The Period from 1896 to 1914

From the international financial standpoint the period immediately preceding the World War is striking because of the fact that the United States not only continued to afford an attractive investment field for European investors, but American citizens set out on their own account to make foreign investments. American imports of securities, however, did not approach the volume of security exports to foreigners. By 1899, foreign holdings of American securities had grown to $3.3 billions, of which $2.5 billions were concentrated in the hands of British investors. Holland and Germany were the largest holders of the remaining amount, while smaller portions were held by Switzerland, France, Belgium, other European countries, Cuba, North Amer-

[1] See T. J. Kreps, "Import and Export Prices in the United States and the Terms of International Trade, 1880–1914," *Quarterly Journal of Economics*, Vol. 40, August, 1926, p. 714, or F. W. Taussig, "International Trade," New York, 1927, pp. 300 and 418.

ican countries and China.[1] According to N. T. Bacon, whose investigation of America's international financial position in 1899 with the assistance of prominent bankers is generally regarded as authoritative, foreigners held practically no American industrial securities, nor any state, county or municipal bonds. The amount of real estate mortgages held abroad was also small, owing to their forced liquidation as a result of the marked shrinkage in farm land values after 1893.[2]

Following the outburst of prosperity after 1898 there was probably some return of American securities from Europe, although the net exportation remained large.[3] On the whole, the period witnessed a considerable expansion in the aggregate amount of foreign long-term investment in the United States totalling from $4.5 billions to $5.5 billions, or a growth in rough terms of $2 billions.[4] Since this does not include the short-term investments of Europe, possibly another $500 millions should be added as the customary advance extended by foreign financial markets to facilitate the movement of American crops.[5] This was probably the maximum seasonal advance, the permanent residue of this kind of loan, however, amounting to a somewhat smaller figure. Whatever the precise sum of the short-time borrowing, the major portion was owed to London because of the part played by British bankers in financing world trade. The growing interrelationship of European financial centers in the pre-war decade also enabled the participation either directly or indirectly of other foreign bankers.

American capital continued to reach out in foreign investment fields following its initial expansion just before the turn of the century. Few of these investments went to Europe, but were largely concentrated in neighboring areas, Canada, Mexico, Cuba and South America, reaching a total of $500 millions in 1899,[6] and growing to between $2.1 billions and 2.6

[1] Bacon, *op. cit.*, p. 276. [2] *Idem.*

[3] In the ten years before 1906 not less than $250 millions of railroad stocks alone were permanently returned from Europe, although many of the former owners merely exchanged them for collateral trust bonds being offered at attractive terms to bring about railway mergers. Ripley, *op. cit.*, pp. 7–8.

[4] Bullock, Williams and Tucker, *op. cit.*, p. 230.

[5] Paish, *op. cit.*, p. 175.

[6] *Idem.*, and Bullock, Williams and Tucker, *op. cit.*, p. 230.

billions by 1914.[1] This exportation was induced by a growing abundance of investment capital in the United States and the opportunity for profitable employment abroad.[2] Generally speaking, American capital funds went into foreign fields primarily because of the desire of individual American enterprises to extend their operations and broaden their markets. The majority of the investments were made out of the accumulated capital of strong concerns or by particular organizations formed to acquire and exploit natural resources in North and South American countries.

There were, nevertheless, aspects of the development which suggest a widened investment interest in the American financial markets, allured by the returns to be obtained from the purchase of foreign securities. C. K. Hobson, an authority on the international movements of capital funds in this period, distinctly implies this as well as supports the above conclusion in the following passage:[3]

> ". . . signs were not wanting that America was bounding ahead as a financial power. The accumulation of capital during the years following the depression was enormous, and considerable activity was shown in pushing American investment outside the limits of the United States. In 1899, two American insurance companies took up a large part of the 4% bond issues of some Swiss cities. The construction of some London tube railways was undertaken by American syndicates and American capital. The formation of the International Mercantile Marine Company in 1902, by the purchase of the White Star Line and other lines, also indicates the direction in which American enterprise was moving. In Canada, it was estimated that between 1896 and 1900, $100,000,000 of United States capital had been invested, mainly in mining, industrial and lumber companies, and in railroads. By 1911 it was reckoned that the amount had increased to $226,800,000. American finance has also pushed southwards into Mexico where it was recently estimated that $700,000,000 were invested, and into Cuba and the Republics of Central and South America, where investments are estimated at a further $300,000,000, excluding the large amount represented by the Panama Canal. Attention was also directed to the Far East. Several issues of Japanese bonds were made in America during the Russo-Japanese War, and

[1] According to information furnished by Ray O. Hall, Assistant Chief, Finance and Investment Division, Bureau of Foreign and Domestic Commerce, U. S. Department of Commerce.

[2] See G. M. Jones, "Exporting American Capital," *The Economic World*, Vol. 25, May 26, 1922, p. 724, for a slightly different point of view.

[3] See Hobson, *op. cit.*, pp. 153–4.

several projects were mooted for building railways with American capital in China."

To return to the balance of international payments, both exports and imports expanded markedly from 1896, the excess of exports being especially large in every year, and averaging $488 millions. Gold movements were erratic, with alternating years of export and import excesses, but with the average net balance in favor of imports. Large interest payments, tourist expenditures, immigrant remittances, freight payments, payments for American securities re-imported and miscellaneous payments for insurance premiums and financial commissions, plus the foreign securities and titles to wealth imported accounted for the regular export balances of merchandise. Invisible debits causing outward payments played a much larger part than ever before in America's international accounts, as is evidenced by the distribution of the major classes of items.

The Economic Importance of America's Capital Borrowings in the Past

Within the century preceding the war, the average international business transactions of the United States had expanded from an annual average of approximately $200 millions to an average of almost $4 billions. Throughout the period, America had been an extensive borrower of foreign capital, and by 1914, owed to foreign investors no less than $5 billions and possibly more. The last twenty years of the century, however, had seen a status finally attained where foreign investments were beginning to be made by Americans in some volume because of the widening activities of their enterprises and the accumulation of capital resources.

The enormous sums of capital borrowings from foreigners were not always regarded with popular favor. At various times, in fact, they were regarded with serious apprehension. It can hardly be said, however, that the United States as a whole was ever heavily mortgaged. At the most, not more than 5% of the money value of the nation's economic wealth was ever represented by securities and other property titles held abroad, and for most of the period surveyed, the per-

centage was probably less, from 3% to 4%.[1] Interest payments could hardly have been more than 1% of the aggregate money income of the American people in the period around 1870 and 1880, and in other years they were slightly less.[2]

It cannot be denied that great advantages were derived by the United States as an economic unit through the use of foreign capital. Regarding such advantages, Sir George Paish, in 1908, was led to assert that the annual production of wealth by the United States had been increased to an extent nearly corresponding to the amount of capital used, and to at least twenty times the sum needed for interest. Moreover, the accumulated wealth of the country had been increased many times the sum borrowed.[3]

Stated with rhetorical freedom such assertions challenge skeptical attention. A little reflection, however, will tend to make them appear plausible. The borrowing of foreign capital funds by the United States, it will be recalled, was mainly for governmental expenditures and developmental outlays of industry, with the former merging into the latter where governmental borrowings were made to finance public works. Capital loans for developmental outlays were unquestionably the largest portion of the total extended by foreigners, especially after the Civil War period. Through their use in railway construction in particular, new lands and resources for the outpouring of wealth were opened up. Furthermore, their employment had the effect of releasing domestic capital for direct use in agriculture, commerce and manufacturing. This, moreover, was also true of foreign capital borrowings for all other purposes.

Summary

In order to crystallize more completely for the reader the altering character of America's international financial relations, Chart 1 has been prepared summarizing the major

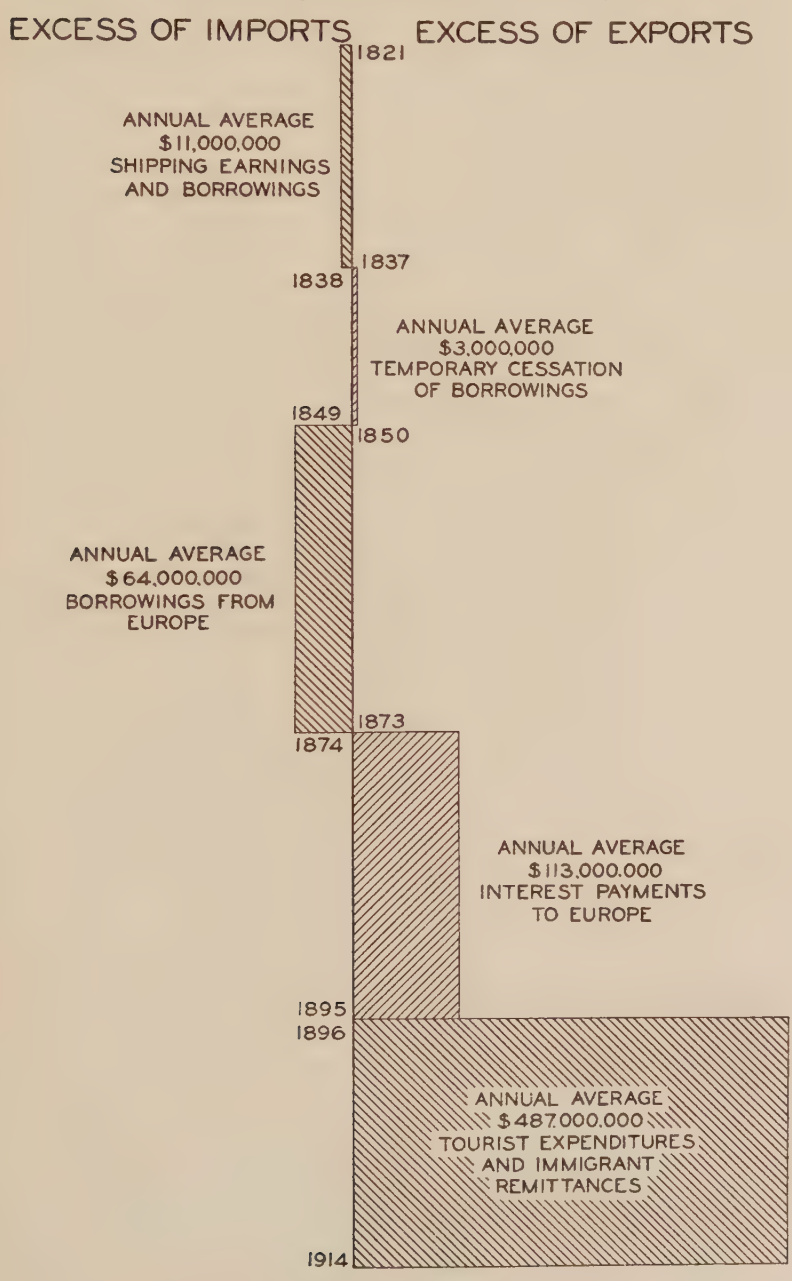
[1] Reckoned roughly from the government estimates of the money value of the national economic wealth in various years.

[2] Using the estimates of W. I. King, "Wealth and Income of the People of the United States," New York, 1917, p. 129.

[3] Paish, *op. cit.*, p. 159.

Chart 1: The Average Annual Balance of Merchandise Trade of the United States During Successive Periods, 1821–1914

(Source: Harvard Committee on Economic Research)[1]
(After 1873, silver is treated as merchandise)



Adapted from Bullock, Williams and Tucker, *op. cit.*, p. 233.

shifts in the balance of merchandise trade and the nature of counter-sources of international payments. In addition, Table 4 presents figures for the aggregate foreign investments in the United States in various years from 1820 to 1914 as estimated by different authorities. The nature of the investments is indicated and accompanied with pertinent comments. The purpose of the table and the chart is to epitomize the foregoing analysis.

Table 4: Estimated Foreign Investments in the United States in Various Years, 1820–1914

(Compiled by the National Industrial Conference Board from miscellaneous sources)

Year	Estimated Amount (Millions of Dollars)	Nature of the Investments (With Sources Noted)	Comment (With Sources Noted)
1820	Between 25 and 50	Representing the foreign debt of the federal government, and foreign investments in American enterprises.[1]	Accurate information on foreign investments in the United States in this period is lacking, the figure given being but a crude statement.[1]
1837	Between 150 and 200	Including the foreign debt of federal, state and city governments, and investments in railways, banks and other enterprises.[2]	A House of Representatives committee estimated in 1843 the amount of state and city government bonds held abroad to be $150 millions.[3]
1847	166	This estimate is said to be one-third mercantile or floating debt indicating a considerable decline in foreign holdings of American securities, due especially to the panics of 1837 and 1839.[4]	As a matter of fact, for several years after 1839, European investors were very skeptical of American investments.[3]
1853	222	A large growth of foreign investments in railways over the previous estimate was a feature.[5]	Estimates by the Secretary of Treasury.[5]

[1] A. Seybert, "*Statistical Annals*," p. 757, estimated foreign investments at $25 millions for 1818, cited by Bullock, Williams and Tucker, *op. cit.*, p. 218. See also pp. 215–6.

[2] Bullock, Williams and Tucker, *op. cit.*, p. 218.

[3] "House Report," No. 296, 27th Congress, 3rd Session, March 2, 1843, pp. 3 and 7, cited *idem.*

[4] "The Panic and Financial Crisis of 1857," *op. cit.*, p. 664.

[5] "Senate Executive Document," No. 2, 33rd Congress, 1st Session, March 2, 1854, by Bullock, Williams and Tucker, *op. cit.*, p. 220. See also an article "American Securities in Europe," *Hunt's Merchants Magazine*, October, 1868, p. 241.

TABLE 4: ESTIMATED FOREIGN INVESTMENTS IN THE UNITED STATES IN VARIOUS YEARS, 1820–1914—(*Continued*)

Year	Estimated Amount (Millions of Dollars)	Nature of the Investments (With Sources Noted)	Comment (With Sources Noted)
1860	400	Expansion of railways mainly accounts for this growth.[1]	Estimate by the Director of the Bureau of Statistics, Department of Treasury.[1]
1868	938	Increase accompanied a vast extension of federal, state and local indebtedness and further expansion of railroads.[2]	A return of American securities occurred from 1860–63 to the extent of $200 millions. Securities bought by foreigners after 1863 were obtained at a large discount.[2]
1873	1,500	Railway and industrial expansion absorbed most of growth.[3]	A marked increase of foreign borrowing occurred in the late sixties and early seventies.[3]
1878	1,000	Large withdrawals of foreign investments of all sorts accompanied the depression period after 1873.[4]	Between 1876–78 withdrawals are said to have amounted to $300 millions.[4]
1883	2,000	New investments went into railways, mines, land and industries.[5]	U. S. railway securities alone quoted on the London Stock Exchange amounted to $1,535 millions.[5]
1895	2,500	Prior to 1893, there had been large foreign investments in real estate, but the panic of 1893 and the subsequent shrinkage of farm land values caused investments in real estate to be withdrawn.[6]	Foreign investments had approached $3 billions in 1890 but withdrawals reduced the amount $500 millions by 1895.[7]
1899	3,330	The vast mass of foreign holdings were in railroads. Only very small investments remained in industrial and banking securities, state, county and municipal bonds and real estate mortgages.[8]	The late nineties witnessed a considerable growth of American investments abroad, which amounted to $500 millions by 1899, largely concentrated in North and South America.[8]

[1] "American Securities in Europe," *op. cit.*, p. 245. See also "The Panic and Financial Crisis of 1857," *op. cit.*, p. 664, in which the writer estimates foreign investments in the United States as of 1857, as from $400 to $425 millions. Due to the usual post-panic caution characteristic of the investment market, there was likely little growth to 1860 and perhaps some return.

[2] *Ibid.*, p. 245. One year later David A. Wells estimated foreign investments to be $1.4 billions. See his Report as Special Commissioner of Revenue, *op. cit.*, pp. XXVII–XXIX; and also Bullock, Williams and Tucker, *op. cit.*, p. 223.

[3] Bullock, Williams and Tucker, *op. cit.*, p. 223.

[4] *Ibid.*, p. 225, and Graham, *op. cit.*, p. 231.

[5] *Idem.*, and also Paish, *op. cit.*, p. 173.

[6] Bacon, *op. cit.*, p. 268; and Bullock, Williams and Tucker, *op. cit.*, p. 229.

[7] Bullock, Williams and Tucker, *op. cit.*, p. 226.

[8] Bacon, *op. cit.*, p. 276, and Bullock, Williams and Tucker, *op. cit.*, p. 229.

TABLE 4: ESTIMATED FOREIGN INVESTMENTS IN THE UNITED STATES IN VARIOUS YEARS, 1820–1914—(*Continued*)

Year	Estimated Amount (Millions of Dollars)	Nature of the Investments (With Sources Noted)	Comment (With Sources Noted)
1908	6,000	While the largest proportion by far were American railway securities, there were also large investments in American industrial and other securities.[1] A large portion of the shares of railway stock held abroad were returned between 1899 and 1906, presumably exchanged for bonds.[2]	Sir George Paish estimated that an additional $500 millions ought to be added for floating investments by foreigners in the form of produce bills, finance bills and loans against securities and overdrafts. American securities quoted on the London Stock Exchange in 1908 were valued at $9 billions. Offsetting American foreign investments were $1.5 billions.[1]
1914	4,500 to 5,500	Approximately four-fifths were railroad investments. Foreign floating investments might increase their figure.[3]	Likely the 1908 estimate is an overstatement.[3] American investments abroad had grown by 1914 to approximately $2.1 to $2.6 billion.[4]

[1] Paish, *op. cit.*, p. 175.

[2] Ripley, *op. cit.*, pp. 7–8.

[3] Bullock, Williams and Tucker, *op. cit.*, p. 230. While there is no evidence of an increase of foreign holdings of American securities after 1908, it is also true that there is no evidence of large withdrawals. Since the consensus of expert opinion agrees that foreign investments in the United States as of 1914 were around $5 billions it is likely that the 1908 estimate is excessive.

[4] See Williams, *op. cit.*, p. 201 (footnote b). Professor Williams here states that the average amount of pre-war investments was probably $1 billion, although they had been previously estimated at $1.5 billions. The difficulty of estimate arises from the fact that the investments were mainly made directly by individual firms and did not appear on the security markets. Ray O. Hall of the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce (Finance and Investment Division), places American foreign investments in 1914 at from $2.1 billions to $2.6 billions.

CHAPTER III

THE WORLD WAR AND TRANSITION OF THE UNITED STATES TO AN INTERNATIONAL CREDITOR POSITION

A STRIKING and profound readjustment of America's international financial status accompanied the World War. Sweeping international financial realignments necessarily occurred during this period of hectic military activity. Europe, the center of the conflict, was compelled virtually to terminate her export connection with other areas and at the same time to acquire a tremendously increased volume of imports. An almost complete reversal of the pre-existing flow of international trade was required. Debtor-creditor relationships, evolved through a long period, were suddenly placed under terrific strains, demanding a complete rearrangement within the space of a few years.

Beginning the period as a debtor to Europe, America emerged at its close not only as the creditor of Europe to an enormous figure, but also of practically every other important area to large amounts. In addition, her debts to foreigners for invested capital were materially diminished. So striking were these changes, and so closely contemporaneous are they, that in large part they remain familiar. Nevertheless, events have moved swiftly since, obscuring the economic significance of forces set in operation and the influence which they have exerted upon subsequent developments. This transition period in international finance may be reviewed, therefore, with the same objective held in the preceding chapter, namely, that of obtaining a general view of the debtor-creditor shifts which occurred. Owing to the significance of the period, its brief span and its domination by a single great event, it is necessary to broaden somewhat the scope of the treatment.

The Statistical Data

A view of the period may be obtained initially from a careful scrutiny of the international payments of the United

States for the period. Similarly to the preceding chapter, but in more detail, this material appears in accompanying tables. Table 5 presents a summary of the balance of international payments in each year; Table 6 gives the percentage distribution of the major classes of items; and Table 7

TABLE 5: SUMMARY OF THE ESTIMATED BALANCE OF PAYMENTS OF THE UNITED STATES FROM 1914 (LAST SIX MONTHS) TO 1919

(Source: Harvard Committee on Economic Research.[1] Revised and arranged by years by the National Industrial Conference Board)

Year	Credits, Reflecting Payments into the United States							
	Total	Merchandise and Silver Exported[2]	Gold Exported[3]	Securities and Other Claims to Wealth Exported[4]	Interest Receipts[5]	Foreign Government Debt Payments to U. S. Government[6]	Service Exports[7]	Net Unaccounted for
1914 (last six months)	1,566	1,091	139	..	70	..	28	238
1915	4,267	3,609	31	..	160	..	119	348
1916	6,226	5,554	160	75	230	..	207	..
1917	8,274	6,318	373	100	280	100	276	827
1918	9,238	6,402	41	565	300	160	297	1,473
1919	10,351	8,159	410	606	350	273	553	..

Year	Debits, Reflecting Payments out of the United States							
	Total	Merchandise and Silver Imported[2]	Gold Imported[3]	Securities and Other Claims to Wealth Imported[8]	Interest Payments[9]	U. S. Government Advances to and Foreign Exchange Bought from Foreign Governments[10]	Service Imports[11]	Net Unaccounted for
1914 (last six months)	1,566	822	30	414	86	..	214	..
1915	4,267	1,813	452	1,450	136	..	416	..
1916	6,226	2,424	686	2,200	118	..	482	316
1917	8,274	3,005	553	750	100	3,301	565	..
1918	9,238	3,102	62	128	100	5,067	779	..
1919	10,351	3,993	207	1,045	100	2,589	1,355	1,062

[1] Bullock, Williams and Tucker, *op. cit.*, pp. 234–52; J. H. Williams, and F. A. Vanderlip. "The Future of Our Foreign Trade," *Review of Economic Statistics*, Supplement, Vol. 2, April, 1920, pp. 20–1; and J. H. Williams, "The Balance of International Payments of the United States for the year 1920," *ibid.*, Supplement, Vol. 3, June, 1921, pp. 199–205.

[2] U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, "Statistical Abstract of the United States for 1925," pp. 447–9.

[3] *Idem.*, Allowances for earmarked gold are from the Federal Reserve Board, "Annual Report," 1927, p. 78, and Williams, *op. cit.*, pp. 181–2.

[4] Roughly, $75 millions allowed for capital repayment in 1916, $100 millions in 1917 and $125 millions in 1918. See Bullock, Williams and Tucker, *op. cit.*, p. 246. The 1918 figure also includes credits from Spain, Argentina, India, Peru and Bolivia,

Footnotes continued on page 37.

contains the net balances of these major classes. All the figures, save those for merchandise and gold, are subject to a wide margin of error because of the inadequacy of the available information, and consequently must be interpreted with caution.

The immediate economic effect of the war was to stimulate European demands for American exports. A subsequent

to stabilize exchanges (see below, p. 45) and currency exports of $100 millions, estimated from the Federal Reserve Board, "Annual Report," 1918, p. 260. In 1919, the amount consists mainly of capital repayments, about $515 millions, plus currency exports, Williams and Vanderlip, *op. cit.*, p. 14 and Federal Reserve Board, "Annual Report," 1919, p. 51.

[5] Bullock, Williams and Tucker, *op. cit.*, pp. 251 and Williams, *op. cit.*, p. 192.

[6] Interest payments and principal repaid. For interest payments, see Williams, *op. cit.*, p. 201 (footnote b). The division of interest paid before 1919 amounting to $260 millions between 1917 and 1918 is arbitrary. Principal repayments as given by the United States Treasury, "Annual Report," 1919, p. 323 are assumed to have occurred in 1919.

[7] Shipping services estimated according to Bullock, Williams and Tucker, *op. cit.*, pp. 248–250 and Williams and Vanderlip, *op. cit.*, p. 20, with sale of ships included in 1919. An allowance of 5% of foreign security flotations in the United States is included for commissions for underwriting in each year. A large amount should be added to cover foreign visitors, foreign government representation and expenditure for expert services of American technicians, and freight receipts on exports by land and transit shipments. Insurance service payments receivable should also be included but no reliable basis of estimate is available. Perhaps they were offset by payments for insurance and services from Canada.

[8] New securities imported are based on figures of the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce (Finance and Investment Division,) "Foreign Security Offering," 1914–1919, *Special Circular*, Nos. 245, 262, 264, 270, 275 and 276. Estimated American securities returned from abroad between 1914 and 1918 have been arbitrarily divided between the years. An allowance for direct investments may be assumed to have been included in view of the generous nature of the earlier estimates. See Bullock, Williams, and Tucker, *op. cit.*, pp. 245–6. For 1919, the figures for outstanding securities imported are from the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, "The Balance of International Payments of the United States in 1922," *Trade Information Bulletin*, No. 144, p. 8, and direct investments from Williams and Vanderlip, *op. cit.*, p. 15.

[9] Williams, *op. cit.*, p. 202 (footnote h).

[10] United States Government foreign expenditures and credit advances, United States Treasury, "Annual Report," 1919, pp. 61–6 and 316–23, *ibid.*, 1920, pp. 67 and 330–7; and Williams, *op. cit.*, p. 200–1 (footnote 5) and p. 202 (footnote i).

[11] Expenditures of Americans abroad were figured on the basis of the reported departures of American citizens as given, for example, in the *Survey of Current Business*, Aug., 1928, p. 101, with the assumption of an average expenditure of one thousand 1921–1927 dollars, adjusted for war price fluctuations by the National Industrial Conference Board cost of living index recomputed on this base. Obviously, the results are only approximate. It should be remembered that the character of wartime foreign travel was very different from either pre- or post-war travel. Shipping services are computed according to Bullock, Williams and Tucker, *op. cit.*, pp. 248–50. See Williams, *op. cit.*, pp. 200–1 (footnote 5) and p. 202 (footnote k, l, and m) for data on immigrant remittances and charities.

stimulus was experienced by imports, since materials of all sorts were required to fill European orders. The areas supplying the increased imports, moreover, finding European markets closed to their demands for manufactured products, turned to the United States, adding to the export impetus. Thus, the excess of exports over imports grew to tremendous figures, less than half the former being offset by the latter after 1915.

Of course these excesses were to a large extent the result of price changes, which affected both import and export values,

TABLE 6: THE PERCENTAGE DISTRIBUTION OF THE MAJOR CLASSES OF ITEMS IN THE ESTIMATED BALANCE OF INTERNATIONAL PAYMENTS OF THE UNITED STATES FROM 1914 TO 1919

(Source: Harvard Committee on Economic Research. Revised and computed by the National Industrial Conference Board)

Year	Credits, Reflecting Payments into the United States							
	Total	Merchandise and Silver Exported	Gold Exported	Securities and Other Claims on Wealth	Interest Receipts	Foreign Government Purchases of Exchange from U. S. Government and Debt Payments to U. S. Government	Service Imports	Net Unaccounted for
1914 (last six months)	100.0	69.6	8.9	..	4.5	..	1.8	15.2
1915	100.0	84.6	0.7	..	3.7	..	2.8	8.2
1916	100.0	89.2	2.6	1.2	3.7	..	3.3	..
1917	100.0	76.4	4.5	1.2	3.4	1.2	3.3	10.0
1918	100.0	69.3	0.4	6.1	3.3	1.7	3.2	16.0
1919	100.0	78.8	4.0	5.9	3.4	2.6	5.3	..
	Debits, Reflecting Credits out of the United States							
	Total	Merchandise and Silver Imported	Gold Imported	Securities and Other Claims to Wealth Imported	Interest Payments	U. S. Government Advance to Foreign Governments and Foreign Exchange Bought from Foreign Governments	Service Exports	Net Unaccounted for
1914 (last six months)	100.0	52.5	1.9	26.4	5.5	..	13.7	..
1915	100.0	42.5	10.6	34.0	3.2	..	9.7	..
1916	100.0	38.9	11.0	35.3	1.9	..	7.8	5.1
1917	100.0	36.3	6.7	9.1	1.2	39.9	6.8	..
1918	100.0	33.6	0.7	1.4	1.1	54.8	8.4	..
1919	100.0	38.6	2.0	10.1	0.9	25.3	13.1	10.3

but from the standpoint of an analysis of the balance of money payments that may be ignored.

The export of merchandise was not the only factor requiring an inflow of payments, as may be seen in Table 5. Save for net gold exports in 1914 and 1919, the net inflow of interest payments from 1915 on, and private security exports in 1918, observed in Table 7, the balance of other payments

TABLE 7: THE NET BALANCES OF THE MAJOR CLASSES OF ITEMS IN THE BALANCE OF INTERNATIONAL PAYMENTS OF THE UNITED STATES FROM 1914 TO 1919

(Credit balance + and debit balance −; or net payments into the United States +, and net payments out of the United States −)

(Source: Harvard Committee on Economic Research. Revised and arranged by years by the National Industrial Conference Board)

(In millions of dollars)

Year	Merchandise	Gold	Securities and Other Claims to Wealth	Interest Payments	Government Payments and Credits	Service Payments	Net Unaccounted for
1914 (last six months)	+269	+109	−414	−16	..	−186	+238
1915	+1,796	−421	−1,450	+24	..	−297	+348
1916	+3,130	−526	−2,125	+112	..	−275	−316
1917	+3,313	−180	−650	+180	−3,201	−289	+827
1918	+3,300	−21	+437	+200	−4,907	−482	+1,473
1919	+4,166	+203	−439	+250	−2,316	−802	−1,062

for which estimates are included was outward. In fact, the total of the outward payments for all reasons evidently exceeded the inward payments for the estimates made in each year except 1916 and 1919. Some explanation for these large net unaccounted-for credits consequently must be found for the years in which they occurred; and likewise for net unaccounted-for debits in 1916 and 1919.

The noteworthy aspects of America's abrupt shift from a debtor to a creditor nation are thus summarily stated in these balance of international payments tables. In the subsequent discussion, an effort will be made to supplement them. In so doing, it will be convenient to consider, first, the period prior to America's entry into the war, and second, the period after the entry into the war until its close. Finally, the approximate creditor position of the United

States at the end of 1919 will be indicated. With this background, it will then be appropriate to analyze comprehensively the post-war developments and changes in America's international financial position.

The Financial Consequences of the World War to the United States before 1917

The complete disruption of all foreign exchange markets was the immediate financial consequence of the outbreak of European conflict.[1] Foreign exchange rates on Europe rose to unprecedented heights as Americans rushed to settle their European engagements and European holders of American securities hurried to liquidate their holdings on American markets and to withdraw their funds.[2] Outgoing international payments, in other words, temporarily exceeded incoming payments. Confusion reigned for two memorable weeks in July, 1914, followed by a moratorium on bills of exchange in London, the closing of the New York Stock Exchange from July 31 to December 15, 1914, and the creation of a number of temporary expedients which succeeded in bringing the exchange markets back into line by the end of 1914.[3] This was not accomplished, however, without some gold exports to Europe and Canada. In the meantime, Americans having commitments to make to London lost large sums of money. Finally, unprecedented gold exports to non-European countries took place. The net unaccounted-for credit item in this period probably is explained by the withdrawal of American funds and the heavy accumulation of American bank balances by belligerent governments which took place to finance expanding needs for American products, and by other foreigners because of disrupted conditions in

[1] For a detailed description of these occurrences see Bullock, Williams and Tucker, *op. cit.*, pp. 240–2. See also the various studies on European currency and foreign exchange in the report of the Commission of Gold and Silver Inquiry of the United States Senate, "European Currency and Finance" (1925), Vols. I and II.

[2] The direct absorption of foreign security offerings by American financial markets on a large scale did not commence in this period, a total of only $14 millions being offered. Security imports, therefore, consisted almost wholly of outstanding American securities held by Europeans of both a long and short term character. See the Federal Reserve Board, "Annual Report," 1916, p. 1.

[3] See in this connection, Bullock, Williams and Tucker, *op. cit.*, pp. 240–1 and 245.

Europe. It is also explained in part by a large volume of unrecorded services purchased from Americans.

The upward swing of exports which began in the fall of 1914, indicating that the inward movement of funds was exceeding the outward flow, caused an extreme contraction of foreign exchange rates for the currencies of belligerent countries by the middle of 1915. Recourse to borrowing on the American financial markets was a positive necessity for belligerent countries if they were to finance their requirements for American payments. Moreover, neutrals in need of foreign capital funds were compelled to turn to American markets as older European financial centers turned their attention to strictly war finance. Accordingly, securities of European belligerents to the nominal amount of $585 millions, those of European neutrals for $15 millions, those of Canada for $174 millions and those of Latin America for $38 millions, were purchased.[1] The resale of American securities to the United States continued, furthermore, and was even stimulated by official French and British efforts to mobilize them.[2] Despite the resultant exportation of capital funds as a consequence of these financial operations, principal European exchanges were not wholly stabilized.[3]

The fact that there remained for the balance of payments as a whole an unaccounted-for credit balance, may be interpreted again as in the preceding instance as due to unrecorded payments for American services and also to the accumulation by foreigners, mainly belligerents, of American bank balances which were necessary for the continuous financing of their American demands.

The international financial developments of the year 1916 represented a further accentuation of the shifts which appeared in the preceding year. New European borrowings amounted to $797 millions and were principally by belliger-

[1] U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce (Finance and Investment Division), "Foreign Security Offerings, 1915," *Special Circular*, No. 275.

[2] Bullock, Williams and Tucker, *op. cit.*, p. 242.

[3] Italy, for example, experienced great difficulty in stabilizing her exchanges until the United States entered the war, even though a National Institute of Exchanges was formed by the three government banks of issue to accomplish this through foreign credits. *Idem.*

ent countries.[1] In addition, European belligerents again returned a large volume of American securities. By these transactions and by the shipment of gold, the exchanges of belligerent countries were controlled to a great extent, those of Italy, Germany and Russia evidencing the greatest instability.[2] Canada again resorted to American borrowing for central government purposes, public works, and corporate financing to the figure of $168 millions.[3] Moreover, Latin America offered as much as $152 millions of securities,[4] an influence which, combined with other factors such as increased merchandise imports caused gold shipments to them and also a slight dollar premium upon their currencies, with the exception of Brazil, whose currency was undergoing considerable depreciation.[5]

Taking the balance of payments as a whole, an unaccounted-for debit balance appeared in 1916 as against a credit balance in the preceding period, and this balance would be larger were service export estimates more complete. The reduction of American bank balances due foreigners, the accumulation of American balances in neutral markets and the substantial increase in short-term credits extended to foreigners by banks and by the financial market through an expansion of bankers' acceptance credit to finance foreign trade were probably the significant influences.

Foreign financing to the amount of $470 millions in the first quarter of 1917 chiefly for the European Allies and Canada,[6] brought the total of new foreign securities absorbed by the American financial markets before America's engagement in the war to practically $2.4 billions. Of this amount, approximately $1.8 billions was for the purpose of enabling belligerent countries, especially the Allies, to finance their American expenditures, while the remainder was bor-

[1] U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce (Finance and Investment Division), "Foreign Security Offerings, 1916," *Special Circular*, No. 270.

[2] Bullock, Williams and Tucker, *op. cit.*, pp. 241–2.

[3] U. S. Department of Commerce, *op. cit.*

[4] *Idem.*

[5] Bullock, Williams and Tucker, *op. cit.*, pp. 241–2.

[6] U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce (Finance and Investment Division), "Foreign Security Offerings, 1917," *Special Circular*, No. 264.

rowed chiefly by local governments and corporations of Canada, Latin America and Europe to finance local expenditures. Another $1.9 billions of American purchasing power was obtained by foreigners, principally by European belligerents, through the resale of American securities.[1] While it is impossible to view the entire movement of all capital funds in and out of the United States in this short period with statistical accuracy, the outward flow of capital funds occasioned by security imports may be placed at $4.3 billions. Direct acquisition of foreign properties by Americans and the repayment of the virtually permanent floating credits customarily extended by Europe before the war must have added another $400 millions to this figure after an allowance is made for the accession of foreign bank balances in the United States.[2]

American Participation in the World War and the Export of Capital

Following America's declaration of war, lending to the outside world took the form primarily of direct advances by the United States Government to the countries associated against the Central European Powers under the authority of the various Liberty Loan Acts.[3] In 1917 alone these advances amounted to $3.3 billions, with about $100 millions charged for interest, explaining the unusual stability of Allied exchanges. Public flotations of foreign loans, therefore, declined rapidly in the second and third quarters of the same year and in the last quarter practically ceased. Nevertheless, Canadian loans were offered to the amount of $145 millions and other non-European loans to $8 millions.[4]

The major direction of the gold movement was into the United States in the first half of 1917, although large exports

[1] Bullock, Williams and Tucker, *op. cit.*, p. 246.

[2] These foreign bank balances constituted in essence an offsetting loan to the United States.

[3] World War Foreign Debt Commission. "Combined Reports," 1922–1926, pp. 312–3.

[4] U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, (Finance and Investment Division), "Foreign Security Offerings, 1917," *Special Circular*, No. 264.

to South American countries occurred in the third quarter because of the adverse balance of payments with those countries, excepting Brazil.[1] In the last quarter of the year, gold movements in either direction were of decreasing importance —imports because they were no longer necessary from European belligerents and exports because of the export embargo authorized by a Presidential proclamation of September 7th.[2]

Viewing the year as a unit, outward payments resulting from net gold imports, net service imports and the import of securities and other evidences of debt for which estimates exist exceeded needs for inward payments by over $800 millions. In all probability, this net unaccounted-for sum represented an enormous increase in foreign bank balances in the United States, although it also included payments for innumerable services not calculable and advance payments for merchandise and services. The importance of the first named is clearly supported by official figures given in Table 8, showing that dollar balances of foreigners totalled $997 millions at the beginning of 1918, while American bank balances abroad were only $226 millions. Notwithstanding, the amount of payments to Americans in advance and for unrecorded items must have been very large. When allowance is made for the increased volume of foreign trade bankers' acceptances discounted in the United States in this year, which are not taken into account in the security imports of the balance of payments figures,[3] and other short-term credits, moreover, they may have been very much larger.

United States Government advances to foreign governments in 1918 amounted to slightly over $4 billions, while new security imports were negligible. To provide necessary foreign currencies to care for war expenditures in Europe, the Treasury exchanged over $1 billions for equivalent sums with the Allied Governments.[4] By these financial operations all requirements for international payments by the govern-

[1] Bullock, Williams and Tucker, *op. cit.*, p. 242, Federal Reserve Board, "Annual Report," 1917, p. 20.

[2] Federal Reserve Board, *op. cit.*, p. 21.

[3] American Acceptance Council, "Bankers' Acceptances," 1928, p. 27.

[4] United States Treasury, "Annual Report," 1918, pp. 36–7, and Williams, *op. cit.*, p. 202 (footnote i).

ments concerned were cared for and the exchange rates on Allied countries regulated.

Foreign exchange rates upon a number of neutrals, however, were unstable and at a premium because of adverse balance of payments conditions. To control them credit arrangements were entered into during the year with the governments of the Argentine, Bolivia, Peru and India, to be carried out by their central banks and the Federal Reserve Bank of New York.[1] In addition, the Treasury arranged a Spanish credit with a syndicate of Spanish banks.[2] The total of these credits amounted to about $340 millions and, with capital repayments of foreigners to Americans of $125 millions and currency exports added, explains the securities exported item in this year.[3] The increase in foreign bank balances in the United States over American bank balances abroad, shown in Table 8, clears up part of the net unaccounted-for credit balance in 1918, the remainder probably representing advance and unidentified payments to Americans, mainly for services.

Although the period of conflict actually terminated at the end of 1918, it was inevitable that the demands of Europe for American exports should continue and that large amounts of credit should have to be further extended in 1919. The sum of $1,763 millions was advanced by the United States Treasury to foreign governments under the War Loan Acts; $79 millions more were advanced to demoralized countries for relief purposes; and $426 millions of foreign currencies were purchased directly from associated foreign governments.[4] In addition, other governmental payments abroad by the United States Treasury in repayment of the Spanish credit and for military occupation and troop transportation costs amounted to $321 millions.[5] Thus the total United States Government credits and foreign payments amounted

[1] Federal Reserve Board, "Annual Report," 1918, p. 340.

[2] United States Treasury, "Annual Report," 1920, p. 68.

[3] The credits with Bolivia, Peru and India remained in effect only through 1918, while the other two were terminated in 1919 when balance of payments conditions developed more favorably to the United States and their currency rates commenced to fall to a discount.

[4] United States Treasury, "Annual Report," 1920, pp. 67 and 330–7, and Williams, *op. cit.*, pp. 200–1 (footnote 5).

[5] Williams, *op. cit.*, pp. 200–1 (footnote 5).

to about $2.5 billions and were offset only slightly by foreign government debt payments to the United States Government of $243 millions.

Public offerings of foreign securities again expanded, amounting to $562 millions; $343 millions to Europe, $132 millions to Canada, $72 millions to Latin America and $15 millions to others.[1] Moreover, $234 millions of outstanding American and foreign securities were imported,[2] and other foreign investments were made directly to the sum of about

TABLE 8: DOLLAR BALANCES OWED BY THE UNITED STATES TO FOREIGN AREAS AND OWED BY FOREIGN AREAS TO THE UNITED STATES, 1918 AND 1919

(Source: Federal Reserve Board)[1]
(In Millions of Dollars)

Area	Feb. 27, 1918		June 26, 1918		Dec. 31, 1918		June 25, 1919	
	Owed by the U. S.	Due to the U. S.	Owed by the U. S.	Due to the U. S.	Owed by the U. S.	Due to the U. S.	Owed by the U. S.	Due to the U. S.
Europe—Allies	507	136	621	94	508	85	369	70
Europe—Neutrals	264	1	281	..	324	1	277	6
Europe—Central Powers	3	6	..	9	2	12	2	19
Asia	67	28	137	39	175	86	155	158
North America	115	17	134	89	107	77	162	76
South America	40	37	100	59	96	62	81	65
Africa & Oceania	1	1	3	6	5	10	6	13
Total	997	226	1,276	296	1,217	337	1,052	407
Net balance	771	..	980	..	884	..	645	..

[1] "Foreign Exchange Operations, 1918–1919," *Federal Reserve Bulletin*, Vol. 7, Dec., 1921, pp. 1408–10.

$300 millions.[3] Altogether, the total capital funds from private sources exported amounted to over $1 billion, with an offsetting inflow of $600 millions because of capital repayments and currency exports,[4] leaving a net outward balance of such capital funds of over $400 millions. When the net balance of government advances is included and the net inward flow of interest payments deducted, the net outward

[1] U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, (Finance and Investment Division), "Foreign Security Offerings, 1919." *Special Circular*, No. 245.

[2] *Trade Information Bulletin*, No. 144, p. 8.

[3] Williams, *op. cit.*, p. 200.

[4] *Idem.*

balance of estimable payments on capital account may be placed at almost $2.8 billions.

Other features of the 1919 balance of payments should be noted. First, a substantial export of gold took place after the removal of the gold embargo in the middle of the year, principally to Latin America and Far Eastern countries. These exports represented a withdrawal of American bank balances built up by certain countries of these areas during the war because of the premiums obtaining for their currencies and the restrictions on gold exports. Although actual gold imports were small, effective gold receipts amounted to $207 millions because of the earmarking for Federal Reserve banks of $131 millions of gold at the Bank of England.[1]

A second feature of the year was the increase in service payments to foreigners, making for a net outward balance of around $800 millions, due mainly to the expansion of immigrant remittances, tourist service payments and charity contributions. Even when this net outward balance is included with other debit balances, incoming payments exceeded outgoing payments by almost $1.1 billions. Undoubtedly, this unidentifiable excess was due in part to shipments of merchandise previously paid for, to excess export valuations,[2] to the withdrawal of foreign bank balances in the United States and the increase of American bank balances abroad (a trend suggested by the final columns of Table 8), and finally by the extension of short-term credits by American exporters and bankers through open book accounts and bankers' acceptances.

Notwithstanding, there must have been a real excess of inward payments from Europe and Canada which ordinarily would have been settled by gold imports. Excessive currency issues and embargoes on gold, aspects of the abandonment of the gold standard, however, prevented them. It was inevitable, therefore, that 1919 should have witnessed the dollar at a premium for European and Cana-

[1] Federal Reserve Board, "Annual Report," 1919, p. 52. This earmarked gold represented the major portion of $173 millions paid by the German Government to the United States Grain Corporation for foodstuff purchases. The Grain Corporation then sold the gold to the Federal Reserve banks which imported $42 millions of it and held the remainder in London.

[2] Williams, *op. cit.*, p. 200.

dian currencies when the exchange pegging operations employed during the war were terminated. The fact that principal South American and Far Eastern currencies persisted at generally high levels, on the other hand, in spite of the gold exports to those countries, suggested that they were still under the pressure of a net outward flow of payments.[1]

The Creditor Position of the United States at the End of 1919

The kaleidoscopic financial shifts which took place in the period treated left the United States an international creditor to an almost inconceivable figure. Just how large is difficult to reckon precisely, but estimates of approximate reliability would place the total capital obligations of foreigners to Americans at around $18 billions by the end of 1919, determined as follows:

(In millions)	
Private loans to foreign governments, states, municipalities and corporations outstanding at the end of 1919[2]	$2,178
Estimated direct investments of Americans in foreign properties and securities[3]	3,500
Credits advanced to foreign governments by the United States Government for war, sale of war supplies, and relief purposes (including expenses of Army of Occupation charged to Germany)[4]	10,246
Total long term obligations of foreigners	$15,924
Estimated unfunded credits due the United States by foreigners[5]	2,000
Total of all capital obligations of foreigners to the United States	$17,924

[1] "Foreign Exchange Rates, 1919–1927," *Federal Reserve Bulletin*, Vol. 14, Jan., 1928, pp. 56–62.

[2] According to a compilation of J. P. Morgan and Company, Dec. 10, 1919, Williams, *op. cit.*, p. 190. If anything, this figure is an underestimate.

[3] American investments abroad have been estimated at approximately $2.1 billions to $2.6 billions before the War, consisting largely of direct investments. Assuming these to have been from $1.0 billions to $1.5 billions during the war period, the above figure is obtained. It is unquestionably conservative. See Bullock, Williams and Tucker, *op. cit.*, p. 251, in which they admit a possible increase in direct American investments of over a billion dollars.

[4] United States Treasury, "Annual Report," 1920, pp. 65–7 and 330–7. For estimated costs of Army of Occupation, see Williams, *op. cit.*, p. 200 (footnote 5).

[5] Dollar balances due the United States must have been around $500 millions by the end of 1919. Open-book credits and bankers' acceptance financing of foreign trade probably amounted to another $1,500 millions at least.

The resulting figure represents capital obligations of foreigners to America in nominal terms only. The market value of the publicly floated loans, for example, was possibly $100 millions less. The market value of credits advanced by the United States Government to foreign governments, moreover, in view of the subsequent adjustments made in them, which are discussed in detail in Chapter VIII, was very much less. The gross creditor position of the United States, therefore, can more correctly be placed at about $14 billions, than $18 billions.

Against this estimate should be set, of course, the sums which the United States continued to owe to foreigners because of their American investments. The securities representing these investments were not entirely returned during the war. In fact, over half of them probably remained in foreign hands, or roughly $2.8 billions.[1] In addition, foreign bank balances in the United States were probably around $1 billion at the close of the year,[2] making an estimated total of America's foreign obligations of about $3.8 billions. Accordingly, the nominal value of the net creditor position was about $14.1 billions. When allowance is made for the probable market worth of the outstanding publicly offered foreign securities and government advances, the net obligations of foreigners should be reduced to around $10 billions, a figure roughly $7 billions to $8 billions in excess of the net capital debt of Americans to foreigners as of 1914.

To sum up the altered character of America's international financial relations, Europe had been virtually her only creditor before the war and Canada and Latin America had been her principal debtors. At the close of 1919, Europe had become America's main debtor and at the same time remained her chief creditor. Canada was of next importance as a debtor and Latin America third, but they were both overshadowed by the capital liabilities of Europe.

[1] Assuming foreign investments in the United States before the war to have been $5 billions, and deducting $2.2 billions for returned securities. This latter sum includes the estimate of American securities reimported up to 1919 by Bullock, Williams and Tucker, *op. cit.*, pp. 245–6, plus the U. S. Department of Commerce figure for 1919, *Trade Information Bulletin*, No. 144, p. 8.

[2] See Table 8, p. 46.

How Was America's Debtor-Creditor Transition Possible?

This amazing shift from a nominal net debtor position of $2.5 billions to a nominal net creditor position of $18 billions within the five and a half years of the war period demands some explanation. How was the United States able to supply foreigners with the enormous quantity of capital funds necessary to bring about this alteration of status and also take care of her own capital and war-time financing? Although no more than a brief answer can be given, a few facts may be pointed out which should be kept in mind in reading following chapters.

Increased money savings inevitably resulted from the extraordinary developments of the period. The physical production of goods, for example, according to available indexes, showed an increase of between 24% and 29% from 1914 to 1917, only to fall off 10% by 1919.[1] At the same time, wholesale prices rose on the average 79% by 1917 and 26% more by 1919. Finally, from the middle of 1914 to the middle of 1917, all commercial bank loans and investments in the United States expanded 39% and all commercial bank deposits 42%. Extending the period to the middle of 1919, the increase in the former was 87% and in the latter 81%, making annual averages of 17% and 16% respectively.[2] As this credit growth became diffused over the entire country by means of bank loans and investments and the price mechanism, it resulted in increased money incomes for all classes and led, consequently, to a very much greater absolute volume of money savings for investment, a movement enormously stimulated after 1917 by the war-time pressure for saving " 'til it hurt." It also resulted in the direct absorption of many new capital securities by financial institutions, merely through credit extension. In other words, largely in response to a very rapid expansion of credit purchasing power, the United States was able to finance European war demands as well as the flotation of other foreign

[1] Carl Snyder, "Business Cycles and Business Measurements," New York, 1927, p. 239.

[2] United States Treasury, "Annual Report," 1920, p. 1428.

and domestic capital offerings and absorb the enormous Liberty Bond issues of the United States Government after America's entry into the war.

A summary of the three principal factors acting in combination with the war period business psychology to enlarge the nation's credit purchasing power would include the following items: First, the inauguration of the Federal Reserve System in 1914 reduced the reserve requirements of the National Banking System and facilitated the rapid accession of credit throughout the banking structure. Second, the inflow of gold before America's entry into the war augmenting the country's gold stock and credit base by 62%, was an inevitable stimulus to credit growth. Third, after the actual participation of the United States in the war, the emergency financing of the United States Treasury and the Liberty and Victory Loan issues, necessitating close cooperation of the Federal Reserve banks and the unrestrained rediscount by them of all government and commercial paper, further accelerated the swelling of the country's employment of bank credit.

Further elaboration of these points at this time need not be offered. At a later stage there will be occasion to analyze carefully the influence of bank credit extension in the postwar period upon the export of capital funds and also the rôle played by the Federal Reserve System in international financial developments. In the meantime, however, the more recent international movement of all capital funds must be considered statistically and the flows of funds related to the balance of payments as a whole.

CHAPTER IV

THE MOVEMENT OF CAPITAL PAYMENTS AFTER 1919

IN THE preceding two chapters, the object was, first, to present a fleeting survey of the international financial relations of the United States before the war, and second to outline briefly through a study of the nation's war-time balance of international payments, the swift passage from a debtor to a creditor status. Profound and sweeping alterations in the character of this new creditor status have inevitably taken place since the close of the war period, resulting from attendant movements of capital payments or funds across the boundaries of the country. The problem of this chapter is to analyze minutely the exact nature of these flows of capital. Then, in the following chapter, it will be possible to relate these financial shifts to the balance of international payments as a whole, and to obtain a picture of America's present international financial position.

In accomplishing the immediate task, it will prove desirable to distinguish between the flows of international payments on long-term and short-term capital account, a distinction not feasible in foregoing chapters both because of the difference in objective and because of the paucity of satisfactory data. The constitution of each stream, therefore, will be provisionally differentiated from that of the other. The advantages of this approach are readily evident: it lends itself easily to appropriate statistical treatment and it assists a broader understanding of the character of the country's international financial dealings. However, it is merely one step in the present analysis and must be followed by a consideration of the entire flow of capital payments, or the combined net balances of the two streams. It is the impact of the whole international movement of funds on capital account from year to year on the industry, trade and finance of the United States which possesses real significance.

This effort to distinguish between the international currents of funds on long- and short-term capital account must not be interpreted as an attempt to discriminate between the ultimate sources and employment of these funds. In the money markets of this country and the world, all funds are merged. Whatever their temporary employment, there is an obvious impossibility of determining definitely whether their ultimate source is from the production of goods; from community savings for investment; from self-liquidating bank advances, so called because theoretically made in anticipation of goods production or the availability of new savings within a brief time; or from sheer expansion of bank credit absorbed into the business and economic system. Nor is it possible to trace ultimate uses. Nevertheless, a problem of importance is involved. In the last chapter, it was indicated that bank credit expansion was a major factor in the international financial rôle of the United States in the war period. The extent to which it was also a factor in the post-war developments will be mentioned in this discussion, but a fuller treatment will be required later.

The Character of Migrations of Long-Term Capital Funds

An accurate and precise statement of the volume of long-term funds moving in and out of the United States from year to year cannot be obtained, but figures of approximate reliability are available through 1928. These are presented in Table 9. The identification of all incoming payments as credits and all outgoing payments as debits conforms to the accounting procedure of the balance of international payments compilations of the Department of Commerce and other authorities. The use of the terms *imports* for inward capital account payments, and *exports* for outward capital account payments, and the employment of a plus sign for a net balance of the latter and a minus sign for a net balance of the former, however, is different. They are applied in this analysis because they indicate more clearly the meaning which the data are intended to convey. In the subsequent examination of the balance of international payments as a

whole in the post-war period, conventional usage will be followed again. This should be remembered to avoid confusion.

The principal aspects of Table 9 are the various constituents of the credits and the debits, or, in other words, the purposes for which funds on long-term capital account flow in and out of the country. In the remainder of this section, the analysis is devoted to a specific consideration of the factors involved in each separate class of international capital payments. Since general inferences must represent a convergence of conclusions reached with respect to these separate classes, their formulation is properly deferred.

Foreign Security Flotations and the Export of Long-Term Capital Funds

The great emphasis in most discussions of America's international financial relations has been placed upon the large volume of foreign security flotations which have been absorbed by American investors in each post-war year. The detailed figures for the total foreign capital issues from 1920 to 1928 are given in Table 10. By deducting estimated refunding issues from the total par value of these offerings, the column headed *New Nominal Capital* is obtained. These figures do not represent the actual exports of long-term capital from the purchase of new foreign securities, however, because the price paid by subscribers was somewhat less, and a portion of the amount received had to be paid to bankers for underwriting. Allowance for these factors is made in the final column of the table which shows the net export of long-term capital funds from new foreign security flotations, evidencing a substantial upward trend, save for the year 1923.

Every year of the recent period has experienced an influx of new foreign security issues to the American financial markets. Over the entire nine years the expansion is marked, although it varied from year to year. The year 1923, for example, which was characterized by a smaller inflow than any of the previous three years, saw less than half as many foreign securities floated. But European economic conditions were extremely unsettled in 1923, and many foreign

TABLE 9: THE INTERNATIONAL PAYMENTS ON LONG-TERM CAPITAL ACCOUNT OF THE UNITED STATES, 1920–1928

(Outward payments + and inward payments −)

(Sources: U. S. Department of Commerce from 1922 to 1928.[1] Miscellaneous sources for 1920 and 1921 with supplementary estimates by the National Industrial Conference Board[2])

(In millions of dollars)

Item	1920	1921	1922	1923	1924	1925	1926	1927	1928
Credits, incoming payments on long-term capital account or imports									
Outstanding securities exported	..	73	491	617	574	746	964	1,259	2,076
Direct investments of foreigners[3]	25	25	30	46	61	76	83	79	120
Principal of government advances and credits returned[4]	51	91	100	134	34	26	35	46	50
Redemption and sinking fund receipts	571	255	92	81	119	221	322	304	361
Interest and dividends on private investments	420	475	530	564	600	644	683	743	817
Interest on government advances	6	40	126	167	160	160	160	160	160
Total Credits or Imports	1,073	959	1,369	1,609	1,548	1,873	2,247	2,591	3,584
Debits, outgoing payments on long-term capital account or exports									
Net new security imports[5]	397	571	627	365	876	953	1,009	1,183	1,124
Outstanding securities imported	739	253	510	252	443	371	595	827	1,721
Direct investments of Americans	300	200	116	47	113	219	240	257	378
Government advances to foreign governments and other credits[6]	246	85	53	..	..	..	..	..	..
Redemption and sinking fund payments	40	40	45	50	55	60	65	70	70
Interest and dividends on private investments	100	100	120	140	150	165	190	203	252
Total debits or exports	1,822	1,249	1,471	854	1,637	1,768	2,099	2,540	3,545
Balance, credit or import − and debit or export +	+749	+290	+102	−755	+89	−105	−148	−51	−39

[1] Based on information furnished by Ray O. Hall, Assistant Chief, Finance and Investment Division, Bureau of Foreign and Domestic Commerce, and includes the latest revised figures of the Department of Commerce.

[2] See Appendix A. Sources for 1920 and 1921 are given in footnotes.

[3] Includes resale to foreigners of American direct investments abroad.

[4] Includes until 1924 repayment of export credits advanced by the United States War Finance Corporation.

[5] These figures are from Column VI of Table 10.

[6] Includes export credits of the United States War Finance Corporation.

currencies suffered new declines in their exchange values. Neither the Dawes Plan nor the Locarno treaties had come into existence, it should be recalled, the Ruhr invasion being the outstanding political feature. There was a relative scarcity of loanable domestic funds, moreover, which reflected

TABLE 10: FOREIGN CAPITAL ISSUES PUBLICLY OFFERED IN THE UNITED STATES AND THE NET EXPORT OF NEW LONG-TERM CAPITAL, 1920–1928

(Source: U. S. Department of Commerce,[1] Arranged by the National Industrial Conference Board)

(In millions of dollars)

Year	Amount floated in the U. S.		Estimated Refunding to Americans	New Nominal Capital	Underwriters' Commissions	Net Export of Long-term Capital Funds from New Security Flotations
	Par Value	Issuing Value[2]				
	I	II	III	IV[3]	V	VI[4]
1920	636	581	151	485	33	397
1921	675	647	44	631	32	571
1922	827	775	99	728	49	627
1923	487	465	74	413	26	365
1924	1,215	1,142	214	1,001	52	876
1925	1,303	1,240	231	1,072	56	953
1926	1,306	1,266	176	1,130	81	1,009
1927	1,537	1,481	235	1,302	63	1,183
1928	1,483	1,420	237	1,246	59	1,124

[1] Figures for 1920 are from the Bureau of Foreign and Domestic Commerce, (Finance and Investment Division), "Foreign Security Offerings, 1920," *Special Circular*, No. 239, corrected according to revised figures on securities floated and refunding in "American Underwriting of Foreign Securities in 1928," *Trade Information Bulletin*, No. 613, p. 3, with ratio adjustments for issuing value and underwriters' commissions. Figures for 1921 are from "Foreign Security Offerings, 1921," *Special Circular*, No. 234. For 1922 to 1928, the figures are from information furnished by Ray O. Hall, Assistant Chief, Finance and Investment Division, Bureau of Foreign and Domestic Commerce.

[2] Cash paid by subscribers equals par value less securities issued below par.

[3] The figures for this column are obtained by subtracting column III from column I.

[4] This column is secured by subtracting III and V from column II.

itself in higher interest rates, discouraging foreign borrowing in that year. Nevertheless, the offerings of foreign securities in 1923, although the least since 1920, reached the impressive figure of $487 millions.

The new flotations of foreign securities in 1924 and succeeding years were the most substantial of all, averaging well over a billion and reaching in 1927 a billion and a half. The flotations in the first half of 1928 suggested a new record in

that year, but higher money rates restrained the volume of additional offerings, while an extraordinary wave of stock speculation diverted interest from newer foreign security issues. Notwithstanding, the 1928 figure was only slightly less than that in 1927. It is only natural, in view of the trend of foreign security flotations, that the resulting export of capital funds should have expanded collaterally.

The Distribution of New Foreign Security Issues

All areas were represented in these enormous borrowing operations with Europe in the lead, as may be observed in Table 11. Demoralized monetary conditions and capital markets reflecting the economic disorganization from the war made Europe's recourse to borrowing American capital necessary to reconstruct her fundamental economic structure, to rehabilitate government finances, and to stabilize currencies in preparation for a return to a gold monetary standard. The restoration of Germany which followed the adoption of the Dawes plan added her demands to those of other European countries for American long-term capital advances. In fact, 22% of Europe's borrowings in 1924; 34% in 1925; 60% in 1926; 38% in 1927; and 46% in 1928 went to Germany, with the balance variously distributed among continental countries.

Before the war, Europe was not only the principal creditor of the United States, but also of Canada and Latin America. Inevitably these areas turned to the United States during the war period to satisfy their requirements. The prevalence of uncertain conditions in Europe and the fact that Europe herself was requiring foreign financing, necessitated continued reliance upon American capital. Canada and Latin America were persistent borrowers, therefore, after 1919. Until 1925 they were about equally important in the volume of securities offered, but after that year, Latin American borrowings were a larger proportion of the total. Far Eastern countries depended, too, upon American loans to a considerable extent, but their issues were 17% of the total in only one year. Flotations for Territorial Possessions occurred in each year, but they were of relatively minor significance.

During the period of disturbed and unsettled foreign conditions, government or government-guaranteed corporate issues predominated. After signs of permanent world economic and financial recovery were more evident, however, purely corporate issues were accepted more and more by American investors. Thus, through 1924, government or

TABLE 11: THE PERCENTAGE DISTRIBUTION OF NEW PUBLICLY OFFERED FOREIGN CAPITAL ISSUES, EXCLUSIVE OF REFUNDING, BY GEOGRAPHIC AREAS AND BY BORROWERS, 1920–1928

(Source: United States Department of Commerce.[1] Computed by the National Industrial Conference Board)

Year	By Geographic Areas						By Borrowers		
	Total	Europe	Canada	Latin America	Far East	Territorial Possessions	Total	Government and Government Guaranteed Corporate	Corporate
	%	%	%	%	%	%	%	%	%
1920	100.0	56.7	29.8	8.5	..	5.0	100.0	68.9	31.1
1921	100.0	28.7	28.8	35.8	2.4	4.3	100.0	81.1	18.9
1922	100.0	31.4	18.9	32.7	16.6	0.4	100.0	71.1	28.9
1923	100.0	26.1	28.5	27.5	17.2	0.7	100.0	71.3	28.7
1924	100.0	57.1	15.7	16.0	10.3	0.9	100.0	83.6	16.4
1925	100.0	60.1	13.8	12.3	13.0	0.8	100.0	59.7	40.3
1926	100.0	43.6	21.1	31.3	2.8	1.2	100.0	51.4	48.6
1927	100.0	41.5	19.5	26.1	10.5	2.3	100.0	62.4	37.6
1928	100.0	47.7	14.8	26.4	10.5	0.6	100.0	60.7	39.3

[1] For the years 1920–1925, the original figures are from the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce (Finance and Investment Division), "Foreign Security Offerings," 1920–1925, *Special Circulars*, No. 234, 239–41 and 260; for 1926, from *Trade Information Bulletin*, No. 503, p. 34, for 1927, No. 552, p. 36, and *Commerce Reports*, April 18, July 18, Oct. 17, 1927, and Jan. 16, 1928; and for 1928, from *Trade Information Bulletin*, No. 613, p. 6. More complete information on the latest revised foreign loan compilations would alter the percentage distributions slightly through 1927.

government-guaranteed offerings averaged 73% of the total, and after that date 58%. The details of this distribution are also contained in Table 11.

How Were New Foreign Issues Absorbed?

So tremendous an expansion of new foreign issues raises at once several questions regarding their absorption on American investment markets. In the first place, was it

true that new capital issues in favor of foreigners were actually limiting the supply of capital funds available for domestic enterprise? If the foreign demand had been absent, would a domestic demand have attracted the same volume of funds into the purchase of fresh capital issues? How would interest rates have been affected? Secondly, what part of the supply of available investment funds really came from community savings and what part from the expansion of bank credit? Finally, who made the purchase of the new foreign issues? Were they chiefly absorbed directly by individuals or did they accumulate in the investment portfolios of large financial institutions, banks, insurance companies and investment trusts which in turn amassed the investors' savings? And to what extent were they rebought by foreigners themselves?

Only a brief analysis can be offered at this point to clarify the issues raised. An answer to the first group of questions must be largely speculative and to a degree incomplete because it overlaps with the second, which cannot be answered adequately until later. It must also remain incomplete because a larger question is involved, namely, whether or not the United States has really been experiencing an actual export of all payments on capital account, a question which must await the consideration of additional data. The final questions, however, are more specific, although the available information bearing upon them is by no means extensive.

With regard to the first questions, Table 12 contains the figures of new foreign capital issues compared with all new capital issues on American markets, exclusive of refunding, with the percentage relationship between them. Total issues increased in the nine years 122%, while foreign flotations increased 157%. The percentage of the total constituted by foreign issues, however, was at the most 18% in 1921, 1924 and 1926. In 1920 it was as low as 13%; in 1922, 10%; in 1928, 15%; and in other years, 17%. Such a proportion, while large, would not seem to be an exhausting drain upon the country's capital supply. The rising values of all securities in the American market, especially domestic issues, and the declining yields which attached to them, would seem to

suggest that an adequate supply of capital funds was available for all demands.[1]

It is true that foreign securities offered higher yields to investors than those which could be obtained from domestic bonds, but it is a matter of argument whether the rates offered were more than commensurate with the risks assumed. In 1920, interest rates on new foreign loans ranged from 6% to 8%, while the average was probably around 7%.[2] In 1921, it has been estimated at nearer 6%.[3] Subsequent investigation has shown that, while the range has widened, being as wide as from 3½% to 8¼%, 7% has been the most

TABLE 12: FOREIGN CAPITAL ISSUES COMPARED WITH TOTAL CAPITAL ISSUES, EXCLUSIVE OF REFUNDING, OFFERED IN THE UNITED STATES, 1920–1928

(Source: U. S. Department of Commerce and *Commercial and Financial Chronicle*)
(In millions of dollars)

Year	New Foreign Issues [1] (Nominal)	Total New Issues [2] (Nominal)	Per Cent Foreign Issues Were of the Total
1920	485	3,635	13
1921	631	3,577	18
1922	728	4,304	17
1923	413	4,304	10
1924	1,001	5,593	18
1925	1,072	6,220	17
1926	1,130	6,344	18
1927	1,302	7,776	17
1928	1,246	8,050	15

[1] See Appendix A. For 1920 and 1921, the figures are from *Trade Information Bulletin*, No. 613, p. 3.
[2] *Commercial and Financial Chronicle*, Vol. 128, Jan. 19, 1929, p. 314.

typical rate except in 1927 and 1928, when it was 6%.[4] The average since 1924, computed on a weighted basis, has been much lower and nearer 6%.[5] If higher rates were paid by

[1] See Chapter VI of this volume.

[2] Williams, "The Balance of International Payments of the United States for the Year 1920," *op. cit.*, p. 191.

[3] Data furnished by the Finance and Investment Division, Bureau of Foreign and Domestic Commerce, U. S. Department of Commerce.

[4] Owing to underwriting charges and other financial commissions, the costs to the borrower were much greater than these yields to investors indicate. See, for example, R. R. Kuczynski, "American Foreign Loans to Germany," New York, 1927, pp. 321–67.

[5] For the years 1924 to 1928 inclusive, the annual weighted average interest rates were respectively 6.09%, 6.11%, 6.18%, 5.98% and 5.67%. See *Trade Information Bulletin*, No. 552, p. 21, and footnote (3) above. With regard to German loans note also, Kuczynski, *op. cit.*, pp. 240–71.

foreigners than would have been necessary in a market more accustomed to foreign lending, perhaps a portion of the rate so paid may be regarded as a premium to develop the custom of foreign investing among American investors. The rates, however, must have been lower than would have been necessary in other markets or the new foreign issues would not have come to America in the same volume.

If new foreign issues had not come to this market, it is impossible to say that interest rates for domestic issues would have fallen more than they did. The period from 1921 until the second half of 1928 may be characterized as one in which unusually easy money and capital market conditions have prevailed. Involved in these conditions was a very rapid expansion of credit based upon exceptional additions to the country's gold stock and also an aggressive effort in certain years on the part of Federal Reserve banks to maintain this credit growth. For various reasons, referred to later, this credit expansion was not thoroughly diffused over industry but concentrated chiefly in the financial markets, affecting the supply of funds for capital employment there, and consequently interest rates.[1] Not only were new foreign securities floated more advantageously, therefore, but domestic offerings were absorbed at lower costs. The existence of a sounder and more satisfactory situation abroad would not have involved the release of foreign gold holdings in favor of the United States. Credit expansion would have been less rapid, accordingly, depending upon Federal Reserve policies and the augmentation of investment funds from credit expansion would have been less notable.

The above analysis does not imply that the investment savings funds of individuals and corporations were not important. They unquestionably were, but their supply was greatly augmented by security loans and investments of banks which, as subsequent data will show, increased to a much greater extent than other expansion of bank credit.[2] Thus, all classes of investors were able to extend their security purchases from credit expansion and especially those

[1] See Chapter VI of this volume.

[2] *Idem.*

in close touch with the central money markets. Whether or not new domestic or foreign offerings benefitted most from the easy money conditions prevailing in the financial markets cannot be determined, but the fairly constant proportion of foreign to domestic issues shown in Table 12 would suggest almost equal advantages to both.

No definite conclusions can be reached as to the favor accorded foreign as against domestic securities by different classes of investors. An investigation conducted by J. P. Morgan and Company in 1926 into the distribution among investors of five representative foreign government issues, however, is suggestive with regard to the former.[1] The aggregate nominal value of the issues amounted to $380 millions and they were marketed in 1923, 1924 and 1925. About 85% of the buyers purchased but small amounts ranging from $100 to $5,000, and approximately 50% of the total amount was taken by the small investors. The remaining 50% was apparently taken by wealthier investors, insurance companies, investment trusts and banks. Undoubtedly, the former three classes of investors took the largest blocks because bank investment requirements necessitated more certain market value than could be predicted for most foreign securities.[2] While the majority of these investors were Americans, many of them were foreigners who preferred to buy their bonds in the United States because of the uncertain outlook in home markets and because of the attractive yields at which they were issued.

The International Movement of Outstanding or Old Capital Issues: Imports

Next to the outward flow of capital funds because of new foreign security imports, the most important movements of

[1] The issues included the Austrian Government Guaranteed Loan (7%, June, 1923), the Japanese Government External Loan (6½%, February, 1924), the German External Loan (7%, October, 1924), the Government of the Argentine Nation External Loan (6%, June, 1925) and the Kingdom of Belgium External Loan (7%, June, 1925). See Dwight W. Morrow, "Who Buys Foreign Bonds?" *Foreign Affairs*, Vol. 5, January, 1927, pp. 219–25.

[2] Investments of national banks alone in foreign securities were $241 millions in 1920, $245 millions in 1923, $372 millions in 1926, and $549 millions in 1928. They were, of course, a larger percentage of the total in 1920 than from 1923 on. See the United States Treasury, "Annual Reports," 1920–1926, and the Comptroller of Currency, "Annual Report," 1928, p. 35.

long-term capital funds occurred in connection with imports and exports of outstanding or old capital issues. In the years 1920, in particular, and to a lesser extent in 1921 and 1922, American capital funds migrated abroad on a considerable scale for the purpose of purchasing old capital issues outstanding of one type or another. In 1920 American securities were bought to the figure of $258 millions, while similar foreign securities imported aggregated $481 millions.[1] Purchases of American securities fell off sharply in 1921 to $26 millions, while the acquisition of outstanding foreign securities aggregated $227 millions.[2] Describing the movement in 1920, Professor John H. Williams wrote: "Besides American and Canadian securities, it is well known that Japanese, Chinese, Argentine and other securities have been purchased from Europe, and also sterling bonds formerly held in Canada, Japan and some other countries."[3] This was likewise descriptive of outstanding foreign securities bought in 1921, as well as in 1922 when $297 millions of such securities were imported. In each of these three years speculation played an important part in the purchase of foreign securities. Although the exact amounts obtained for such intentions is not known, unquestionably it was the largest share.

After 1922, an abrupt reduction in the imports of outstanding foreign securities occurred. Furthermore, they remained comparatively unimportant until 1928. Imports of outstanding American securities, however, tended to increase regularly, with the exception of 1925, and in 1928 totalled $1,153 millions. The entire inflow of both foreign and American old capital issues from 1920 to 1928 can best be described by the following figures:[4]

[1] *Trade Information Bulletin*, No. 144, p. 8.

[2] *Ibid.*

[3] Williams, *op. cit.*, p. 189.

[4] Figures for 1920 and 1921 are from *Trade Information Bulletin*, No. 144, p. 8. From 1922 on figures are from the revised balance of international payments by the Finance and Investment Division, Bureau of Foreign and Domestic Commerce, U. S. Department of Commerce. Some American funds also went abroad to purchase outstanding securities without a corresponding receipt or importation of securities. Instead, they were left on deposit or in custody with foreign banks and brokers. The amounts so held may have been considerable in 1920, 1921 and 1922, but declined in later years. At the end of 1925, there were on foreign deposit to the credit of Americans, securities worth $22 millions; at the end of 1926, $35 millions, and at the end of 1927, $92 millions. The 1928 figures were undoubtedly larger. See the U. S. Department of Commerce balance of international payments studies in 1926 and 1927, *Trade Information Bulletins*, No. 503, p. 40, and No. 552, p. 42.

(In millions of dollars)

	1920	1921	1922	1923	1924	1925	1926	1927	1928
Outstanding American securities bought	258	26	213	212	351	307	485	661	1,153
Outstanding foreign securities bought	481	227	297	40	92	64	110	166	568
Total	739	253	510	252	443	371	595	827	1,721

The International Movement of Outstanding Securities: Exports

Foreigners first began to be noticeably active in American security markets in 1922. Practically no foreign purchases were made in 1920 and only $73 millions in 1921. Subsequent years saw enormous blocks going abroad, even exceeding the amount of outstanding securities bought from foreigners. Both foreign and American securities were bought by foreigners, but the latter predominated. The actual figures were as follows:[1]

(In millions of dollars)

	1920	1921	1922	1923	1924	1925	1926	1927	1928
Outstanding American securities sold	..	42	285	492	397	530	665	861	1,634
Outstanding foreign securities sold	..	32	206	125	177	216	299	398	442
		74	491	617	574	746	964	1,259	2,076
Excess of outstanding securities bought + and securities sold −	+739	+179	+19	−365	−131	−375	−369	−432	−355

Not all foreign funds coming into the American capital market to acquire outstanding securities had the effect of causing security exports. An enormous quantity of the securities bought were left on deposit or "in custody" with American banks and brokers, or branches and agents of foreign banks. While the amounts so deposited were unknown before 1925, at the end of that year and also of the years 1926 and 1927 they totalled $1.7 billions, $1.8 billions and $2.2 billions respectively.[2] Plainly, earlier years must also have seen their gradual accumulation, especially as the

[1] Figures for 1921 are from *Trade Information Bulletin*, No. 144, p. 8, and for later years from the revised balance of payments.

[2] *Trade Information Bulletin*, No. 503, p. 40, and No. 552, p. 42.

rising security market gained momentum after 1923. These deposits, however, could not be said to represent altogether imported foreign capital funds, since such securities may have been purchased "on margin" or may have represented collateral against loans to foreigners by American banks.[1] A large American equity, in other words, may have been held in them.

The Nature of the International Exchange of American Securities

Explanations for the international movements of old capital issues are not always easy to find. Knowledge of the special sources and destination of the large importations and exportations would be of no little assistance, but such data are not available. It is known, however, that large movements characterized financial relations with all important countries, and that the main exchange occurred with Europe and with Canada.

It will be recalled that the early years of the period were characterized by a world-wide depression, commencing in the middle of 1920. Europe, greatly in need of commodity imports and unable to dispose adequately of her products abroad to pay for them, was compelled to relinquish part of her holdings of American securities in order to maintain her importations of foods and materials. But Europe is an area divided by numerous national boundaries, behind which there exists a diversity of interests and aims. Moreover, her security holdings were in the hands of individuals, and a different set of individuals from those who were buying foreign commodities. These holdings were variously scattered over Europe, and their owners were motivated to a certain extent by financial self-interest. For Europe to dispose of any American securities to obtain commodity imports necessitated the operation of forces which would stimulate individual possessors into action.

These forces were concentrated in the phenomenal exchange rate fluctuations of the currencies of virtually all important countries. Heavy paper profits were obtainable by the sale of dollar security holdings in the American

[1] *Ibid.*, No. 503, p. 41, and No. 552, p. 43.

markets and the transference of the funds home.[1] Until the fictitious character of the gains to be so realized was more widely appreciated, such profits were extremely alluring, and Europeans were the aggressors in the exchange. The initial movement, however, was of short duration, dropping precipitously in 1921. Probably the fluctuations of the exchange market played some part in later importations of American securities, at least so long as the currencies of European countries whose citizens were investors in American securities were unstable.

The inflow after 1921 cannot be wholly explained by exchange market fluctuations, however. A considerable portion of it probably reflected the pressure of depressed business conditions in European markets and the necessity for foreign investors to liquidate some of their investments temporarily or permanently, although a share of this liquidation might be regarded as a normal readjustment of investment holdings by individual foreign investors, insurance companies and investment trusts, especially of Europe and Canada. Finally, after 1923, the increased inflow unquestionably was stimulated by rising security values on American money markets, a factor of special importance in 1927 and 1928.

Notwithstanding the general increase in imports of outstanding American securities after 1923, they were regularly exceeded after 1922 by other foreign purchases of similar securities. Motives for the rise of the latter are less easily assigned. The period up to 1925, characterized as it was by widespread monetary instability, caused European and other foreign funds to migrate to the United States because of the stable conditions which prevailed here, and this movement probably continued to a lesser extent until monetary stability was more generally assured. To a certain degree therefore, this flow of funds represented a flight of capital. Since America was the chief market offering a large measure of security combined with investment advantages, American stocks and bonds were purchased on a large scale with these foreign funds. Many of the securities were dispatched abroad, while others remained on deposit with banks and brokers.

[1] Williams, *op. cit.*, p. 191.

Although such influences were especially important during the period of general monetary instability, other factors have tended to supplant them in more recent years. For example, foreign confidence in American investments inevitably widened with the increasing evidence of expanding industrial activity in the United States. Coupled with such signs was an upward trend in the financial market, with low money rates persisting and security values regularly rising. It was only natural that foreign capital, especially of Canadians and Europeans, should seek to participate in current financial opportunities under the circumstances obtaining.[1] It was also to be expected that more and more American securities bought by foreigners should have been left on deposit or "in custody" with banks and brokers to be readily realizable as occasion should demand. In fact, only foreign insurance companies, investment trusts or individual invest ors buying for more or less permanent holding were probably inclined actually to withdraw securities,[2] and even their withdrawals were not entirely permanent, as the large return of American securities attests.

That the volume of international transfers of American securities should have reached such amazing figures in the last few years is not altogether unexpected. The number of foreigners whose financial interest was aroused by opportunities in the American market would naturally be expected to be large in view of the conditions which had developed and the lagging activity on security exchanges abroad. A

[1] Relatively little of this foreign investing, it was said in 1927, was in the more speculative issues, *Trade Information Bulletin*, No. 552, p. 25. The Department of Commerce reported in 1927 that there was evidence that British and Dutch investors were reverting to their pre-war practice of investing in American securities, *ibid.*, p. 24. The increase in British investments here from about $500 millions at the end of the war to about $1.4 billions at the end of 1927 is proof of increased British interest, *ibid.*, pp. 22–5. It is also true that Canadians have been expanding their American holdings. Canadian Provinces are perhaps as closely connected to Wall Street, by ticker service and brokerage agencies, as some of the States. See Ray O. Hall, "Canada as an Exporter of Capital," *Commerce Reports*, July 30, 1928, p. 253; and also "Canada as a Capital Exporting Nation," *Wall Street Journal*, Jan. 10, 1929, p. 15. Other foreign investors included the French, the Swiss and the Swedish, according to *Trade Information Bulletin*, No. 552, pp. 44–5.

[2] "When a foreigner buys American stocks or bonds, he is likely to leave them on deposit with his American banker or broker, as he can thus realize on them more quickly as need and occasion arises, but this practice is not quite universal. A foreign insurance company, investment trust, or individual long-term investor is likely to have securities shipped abroad where they may remain for many years." *Trade Information Bulletins*, No. 503, p. 41, and No. 552, p. 43.

widespread foreign interest coupled with the existence of the essential mechanism for purchase and sale are adequate reasons for the tremendous exchange which occurred.[1] American stocks and bonds were regularly bought and sold on all the leading stock markets abroad.[2]

The Nature of the International Exchange of Outstanding Foreign Securities

The international exchange of outstanding foreign securities possessed equally varied aspects. The large inflow to the United States in 1920, 1921 and 1922 was mainly speculative. It represented purchases of foreign currency stocks and bonds, principally from Europe, particularly Germany, France, Italy and Belgium, and to a lesser extent Great Britain because the discount on sterling was relatively not as great.[3] Low prices on many such securities because of depressed business conditions doubtless made them attractive speculations. An exchange gamble was also involved. Buyers of them anticipated a recovery of exchange rates to their pre-war parities. With the excessive currency depreciation in Central Europe, the successive political crises, and the serious financial problems confronting various European governments, Americans finally became discouraged and withdrew from this speculative activity, disposing of their purchases as best they could either locally or abroad.

The reverse flow of outstanding securities which subsequently took place until 1926 was probably constituted mainly of foreign securities issued in the United States and payable in dollars.[4] These securities were exceedingly popular during the period when the confidence of foreign investors in their own national currencies was low.[5] When

[1] A large portion of the movement was undoubtedly the result of arbitraging, especially in the last few years.

[2] *Trade Information Bulletin*, No. 503 and No. 552, p. 25.

[3] See Vanderlip and Williams, *op. cit.*, p. 16, for an analysis of the American purchases of foreign currency bonds and stocks in 1919. It likewise applies for the years under discussion here.

[4] "The United States as a World Lender," *The Statist*, London, Vol. CXI, Feb. 18, 1928, p. 259.

[5] U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, "The Balance of International Payments of the United States in 1924," *Trade Information Bulletin*, No. 340, p. 21.

their confidence revived, some of their own currency securities which had remained in this market were rebought, but the volume so repurchased could not have been large.

The movement of foreign securities in both directions in 1926 and 1927, though mainly outward, plainly reflected increasing confidence both of foreigners and Americans in conditions abroad.[1] Many securities were repatriated in these years by Canadians and Europeans.[2] Moreover, the British, the Dutch, the French, the Swedish, the Germans and the Swiss were buying each other's securities on the American market as well as their own and probably those of other areas also.[3] Americans, encouraged by the brighter foreign outlook were purchasing particularly stock shares of foreign industrials.[4] Similar purchases by more far-sighted buyers had also constituted part of the American imports of existing foreign securities before these years and probably a large share of the comparatively small volume of such imports from 1923 to 1925.

In 1928, the direction of the flow of outstanding foreign securities was reversed. Although foreigners continued to buy back their own or other foreign securities in record volume,[5] American purchases abroad aggregated $568 millions, or an excess over exports of $126 millions. Press reports from all foreign financial markets have indicated that the largest share of American buying was in foreign corporate securities.[6] New listings upon the New York Stock Exchange and the New York Curb Exchange of "American Shares" and "American Deposit Certificates" issued against securi-

[1] A. Emil Davies, in his book on "Investments Abroad," New York, 1927, pp. 46–8, stresses the fact that Americans demanded higher interest rates on foreign securities than were required elsewhere. Consequently, Europeans could get higher yields by purchasing their securities in American markets.

[2] See Ray O. Hall, "Canada as an Exporter of Capital," *op. cit.* p. 253.

[3] *Trade Information Bulletin*, No. 552, pp. 44–5. Arbitraging in securities and foreign purchases because of higher yields were doubtless important aspects of the movement, especially since a closer interrelationship of international security markets was apparent after 1926.

[4] *Idem.*

[5] This foreign buying was of the same character as in 1926 and 1927. Canadian and European buying was probably the greatest, but it was also reported that the abundance of bank funds in Japan led to a great deal of buying of Japanese dollar bonds in the United States, according to information furnished by Ray O. Hall.

[6] See the foreign financial market reports of the *New York Times*, 1928.

ties of foreign corporations,[1] and the activity of large houses in recommending foreign corporate securities because of higher yields and alleged prospects, evidenced American investing interest. In addition, large American corporations and investment trusts employed their extensive resources in the acquisition of foreign corporate securities, a movement especially notable in the automotive, electrical and public utility industries, and leading certain large British companies to take formal action restricting foreign holdings of issued shares.[2] So significant had this development become that a distinguished English financial journal, the *Economist*, was moved late in the year to remark: "It appears very forcibly that hitherto 'free' international markets in certain industries are passing into unified control dominated by American capital."[3]

The Trend of Direct Investments

Recent financial dealings with foreign countries have experienced further expansion because of the growth of direct investments, made through the establishment of foreign branches by banks and industrial concerns, or other direct participation in foreign enterprises, petroleum projects, mines, forests, and plantations, ownership in which was secured through the acquisition of securities not publicly dealt in on security exchanges. Before the war, it will be remembered, the major portion of American foreign investments were declared to have been made directly. During the war period they greatly increased and in the post-war period their extension has been notable.

Included in the estimated creditor position of the United States at the end of 1919, presented in the last chapter, is a figure of $3.5 billions for direct investment. Possibly it was too low. The outward movement in 1920 was probably

[1] While only five new listings of American shares or certificates issued against foreign shares were placed on the New York Stock Exchange, a larger number were listed on the New York Curb. See "New Listings on the New York Stock Exchange for the Year 1928," *Commercial and Financial Chronicle*, Vol. 128, Feb. 2, 1929, p. 615, and the *Journal of Commerce and Commercial*, Feb. 2, 1929, pp. 1 and 6.

[2] Imperial Airways (British), General Electric Company and Marconi International Marine Communications, Ltd., "American Penetration of British Industry," *The Economist*, London, Vol. CVII, Dec. 15, 1928, p. 1105.

[3] *Idem.*

around $300 millions and in 1921 $200 millions, as nearly as can be judged, but these figures are extremely liberal. According to the latest figures, they were conservatively from 1922 to 1928 inclusive, in millions, $116, $47, $113, $219, $240, $258 and $378.

American direct investments in 1920 and 1921 were to some extent a manifestation of the same speculative state of mind which led to the American purchases of foreign securities which accompanied foreign currency depreciation. In all probability they centered more largely in Canada and Latin American countries, however, than in Europe.[1] Subsequently, investments were of a more conservative character, and were largely for development or exploitation. American business men and corporations in recent years have taken a wider interest in foreign markets, owing to domestic competitive conditions. Hence, with the appearance of greater currency stability, direct investment in foreign properties expanded rapidly not only in the natural resources of undeveloped foreign areas, but in foreign commercial branches and assembly or manufacturing plants for American designed goods.[2] Virtually every area experienced some such direct American investment, but western European countries and Canada undoubtedly the most.

Before 1914, foreign direct investments in American properties were very large, but they were largely diminished during the war period. For several years after the resumption of peace, they were undoubtedly small. For 1922 and 1923, the Department of Commerce has estimated them at $10 millions, in 1924, $20 millions, and from 1925 to 1927, around $30 millions.[3] Direct foreign investments of foreigners in 1928, however, were estimated at more than double the latter figure or $70 millions. Some of these investments were by Canadians, about $10 millions,[4] but the largest share was by Europeans, centering particularly in

[1] Williams, "The Balance of International Payments of the United States for the Year 1920," *op. cit.*, p. 190.

[2] High tariff barriers prevailing in the post-war periods have had a great deal to do with the stimulation of such direct investments. They have also been affected by transportation costs and problems.

[3] According to the most recent balance of payments revisions.

[4] "Canada a Capital Exporting Nation," *Wall Street Journal*, Jan. 10, 1929, p. 15.

the American rayon industry.[1] In every year, additions have been made in Table 9 to the figures just given for the relase of direct American investments to foreigners, representing chiefly the liquidation of property assets of individual Americans and the retirement from the foreign field of smaller concerns.[2]

The Flow of Service Charges on Private Foreign Loans and Investments

How important foreign investments were becoming to American investors as a group is well shown by the trend of interest payments received from abroad. In 1920, interest and dividend receipts by American investors were estimated at $420 millions, a sum $320 millions in excess of the outward interest payments to foreign investors on their American securities. By 1927, American investors were reaping a reward from their foreign investments to the extent of $743 millions and in 1928, $817 millions, or almost double the amount received in 1920. Moreover, interest receipts had grown from 3.8% of the entire incoming international payments to the United States in 1920 to 7.8% of the total in 1928.

On the other hand, foreign investors were receiving payments of $203 millions in 1927 and $252 millions in 1928, or a figure more than double that of 1920. Of the total outward international payments of the country, however, they constituted but 2.4% in 1928 as against 0.9% in 1920. Deducting outward payments from inward receipts for 1928, it is seen that the net interest or dividend return to the United States as a unit from its wide-spread foreign investments was almost twice as much as in 1920.

A considerable expansion of redemption and sinking fund receipts from foreigners was to be expected with the enlarging field of foreign investment, but not the exact movement which occurred. The years 1920 and 1921 saw sizable imports of foreign funds in order to meet maturing loans issued in the early part of the war period for only a few years.

[1] As in 1926 and 1927, *Trade Information Bulletin*, No. 503, p. 41, and No. 552, p. 41.

[2] *Idem.*

A contraction followed, but in 1925 and after, the immigration of funds on this account again expanded, not yet to equal, however, the incoming principal repayment tide of 1920. Exported funds for redemption or sinking fund purposes were not comparable to those imported in any year, although they were more consistent in their entire movement. In other words, the net balance of principal repayment funds was regularly inward in its direction, but by varying amounts.

War Debt Payments in the Post-War Period

Under the stress of circumstances existing in Europe immediately after the war, it was imperative that certain European countries have a volume of emergency funds placed at their disposal. Accordingly, in 1920 further credits were granted by the United States Grain Corporation and the American Relief Administration. In addition, credits were extended under the authority of the war loan acts of Congress for the purpose of enabling several European governments to meet commitments made in the United States in connection with the prosecution of the war.[1] Withdrawals from these credits, and withdrawals from remaining balances of previously established credits, account for the direct government advances of the United States Treasury in 1920 and 1921. Finally, substantial credits were advanced by the War Finance Corporation to finance exports in 1920, 1921 and 1922 which were not entirely liquidated until 1924.[2]

Offsetting these outward payments were interest and principal receipts of the Treasury from foreign government debtors, constituting after 1924 the entire flow of government debt payments. Prior to 1924 war debt payments proper were irregular, coming principally from Great Britain, France, Belgium and Cuba, while from that year on they acquired a consistent growth. Refunding arrangements were being consummated with the principal debtor governments in the later years, resulting in the scheduling of payments and an increase of receipts from them.[3]

[1] See Appendix A of this volume. [2] *Idem.*

[3] These funding agreements are discussed in Chapter VIII of this volume.

The gradual growth of the payments after 1922 is significant because of the amount of discussion they have evoked. In 1924, they were only 12.5% of the entire volume of inflowing payments on long-term capital account and only 2.5% of the total incoming payments on all international accounts. Four years later, in 1928, they were but 5.9% of the former and 2.0% of the latter. In short, relative to the entire flow of funds on long-term capital account, the importance of the debt payments by foreign governments on their obligations to the United States Treasury was declining markedly; and this was also true in relation to the entire incoming payments from abroad, although to a much smaller degree.

The Collective Migration of All Long-Term Capital Payments

It is a common assumption that the recent period has witnessed a substantial export of American capital funds in each year. The evidence pointed to, moreover, is the increasing total of the indebtedness of foreigners to the country at large and the regular prevalence of an export balance of merchandise. While it is quite true that this indebtedness has been mounting enormously, to the extent of about one billion annually in the last few years,[1] it does not follow that the nation as a unit has been actually exporting a balance of capital funds to that amount. Nor does it follow that the merchandise export balance has been altogether due to a net export of investment capital funds. A consideration of the collective migration of all funds on long-term capital account will assist in throwing some light upon the problem, but it also requires an understanding of the international movement of short-term capital which will subsequently be taken up, and of the entire balance of international payments, which will be treated in the following chapter. Conclusions reached at this point, consequently, will be subject to modification when that is done.

The Net Flow of Payments on Long-Term Capital Account

The details of the net flow of all funds on long-term capital account are given in Table 13, which summarizes thoroughly

[1] *Trade Information Bulletin*, No. 552.

Table 13: The Net Movement of All Payments on Long-Term Capital Account in and out of the United States, 1920–1928

(Outward payments or exports + and inward payments or imports −)

(Source: U. S. Department of Commerce and other sources for 1920 and 1921.[1] Arranged by the National Industrial Conference Board)

(In millions of dollars)

Year	Net Investment Fund Flow					Net Flow of Long-Term Capital Service Funds				Net Flow of All Payments or Funds on Long-Term Capital Account
	Long-Term Funds to Purchase New Foreign Securities	Long-Term Funds to Purchase Outstanding Securities	Long-Term Funds for Direct Investment	Government Advances to Foreign Governments and Other Credits	Total Net Investment Fund Flow	Principal Repayment on Private Investments	Interest Payment on Private Investments	Interest and Principal Repayment on Government Advances and Credits	Total Net Flow of Long-Term Capital Service Payments	
	I	II	III	IV	V	VI	VII	VIII	IX	X
1920	+499	+739	+275	+246	+1,759	−531	−320	−57	−908	+851
1921	+571	+180	+175	+ 85	+1,011	−215	−375	−131	−721	+290
1922	+627	+19	+86	+53	+785	−47	−410	−226	−683	+102
1923	+365	−365	+1	..	+1	−31	−424	−301	−756	−755
1924	+876	−131	+52	..	+797	−64	−450	−194	−708	+89
1925	+953	−375	+143	..	+721	−161	−479	−186	−826	−105
1926	+1,009	−369	+157	..	+797	−257	−493	−195	−945	−148
1927	+1,183	−432	+178	..	+929	−234	−540	−206	−980	−51
1928	+1,124	−355	+258	..	+1,027	−291	−565	−210	−1,066	−39

[1] See Table 9.

the material of the preceding discussion. Several features should be noted. Net exports for the purchase of new long-term foreign securities have a marked upward trend for the nine years despite the contraction in 1923. Regarding the net movement of capital funds for the acquisition of outstanding securities, there was a notable shrinkage in the net export migration after 1920, and following 1922 to 1928 the main stream was inward, though by varying balances. The net of long-term direct investments was outward in every year, although in 1922 and 1924 it was small and in 1923 negligible.

Combining these net investment capital movements, including in 1920 and 1921 the United States Government advances to foreign governments and the United States war Finance Corporation credits, it is seen that in every year except 1923 there was an enormous net outflow, largest in 1920, and 1928 and in other years averaging almost $600 millions. Granting that any estimates of the export of investment capital funds are subject to a wide margin of error, the trend of these particular figures is informative and tends to confirm assertions of a "real" export of American long-term capital funds. But there was in each year a material inflow of funds on capital account from abroad, also shown in Table 13, for the purpose of meeting interest, dividend and principal repayments to America because of both private investments and government loans. The combined immigration of such funds, in fact, after a contraction from 1920, rose steadily to $900 millions in 1927 and to $1,066 millions in 1928. Thus, only from 1920 to 1922 and in 1924, when this combined inward stream was less than the outward flow was there an actual net export of all payments on long-term capital account. In 1923, on the other hand, there was a large net importation, while from 1925 on there were nominal net imports.

An Evaluation of the Entire Movement of Payments on Long-Term Capital Account

Approached in this fashion, it is patent that many of the assertions regarding the real net volume of American exports of payments on capital account in the post-war period have

been extravagant. Save in a few years, and principally from 1920 to 1922, America as an economic unit has not been exporting funds on long-term capital account extensively. Rather, she has been accumulating holdings of claims on foreign wealth largely by reinvesting interest, dividends and principal repayment sums due each year, and in five years these sums really exceeded the net outflow of long-term funds for investment. Stated in another way, the United States in the last seven years has not been taking the large sums due her because of previous loans and investments, but has in general tended to replace these funds abroad, accepting in preference foreign securities.

This does not imply that the foreign securities purchased by Americans were bought with the identical funds furnished by the interest and capital repayment receipts from foreigners. Such was by no means the case. All international transactions involve a contribution to, or a withdrawal from, a general fund of purchasing power which exists on the foreign exchange market because of them. The identity of specific parts of the fund and their definite relationship to each other would be obviously impossible to determine. Nor is it intended to suggest that American holders of foreign securities, including the United States Treasury, were not actually receiving their interest, dividend or return of principal payments, but were merely reinvesting their claims to such payments as they became available. Such a suggestion would be thoroughly false. They individually received the payments due and spent them as they pleased, some going directly for commodities and some being reinvested perhaps in new securities. The aggregate income of the national community and consequently its capacity for capital formation and foreign security purchases was increased by just that much, however.

It is wholly correct, therefore, from the standpoint of the country as a unit to say that incoming funds for such purposes have more than cancelled net outgoing funds for the purchase of securities in recent years, and to conclude that it has not been sending abroad greater and greater quantities of its supply of new capital funds but has merely been utilizing cumulatively in new foreign investment net receipts resulting from the creditor position previously acquired.

The Trend of Short-Term Capital Migrations

Thus far the year-to-year significance of short-term capital and credit has been ignored. Figures regarding their exact movement are difficult to procure in any satisfactory form, and precise measurement of the flow of funds connected with them is not practical. Nevertheless, it is possible to obtain an idea of the trend in broad terms from a careful scrutiny of the factors involved, even though not all of them may be clearly identified.

The Nature of Short-Term Capital and Credit Movements

A few examples will serve to indicate the complexities. From the point of view of a balance of international payments the extension of open-book credit by an American exporter to a foreign importer for thirty or more days constitutes in effect an export of short-term capital by the exporter. That is to say, he has tied up so much of his working capital for that long although he has not transferred funds out of the country through the exchange market.[1] If the foreign importer does not buy on credit but pays with a banker's acceptance, drawn, for example, on an American bank, and the American exporter discounts the acceptance at his bank, there is likewise an export of short-term capital furnished by the bank or institution which may eventually buy it, even a Federal Reserve bank. So also for acceptances to finance American goods in foreign transit or storage drawn by an American exporter, accepted by an American bank and discounted in the American market. Again, acceptances to finance American imports, accepted by American banks and discounted in the United States, result in an export of short-term capital because the foreign exporter remains liable to the American bank until the acceptance obligation is finally paid by the American importer. Similarly, acceptances to finance American imports accepted by foreign banks but discounted in the United States result in an export of short-term capital because the foreign bank remains liable for the ultimate payment of the acceptance until the American im-

[1] In other words, he has in effect imported an I. O. U. security in exchange for goods.

porter finally pays it. There is at the same time in this case, however, an offsetting inflow of short-term capital since the American importer remains liable to the foreign bank.

Exports of short-term capital may also be said to occur when bank deposits are accumulated or acquired by American individuals, industrial and commercial corporations and banks abroad. In cases where such deposits are created by loans of foreign banks, there is, technically speaking, both an export and equivalent import of short-term capital. Outward payments on short-term interest and commission account constitute an export of funds properly included under the short-term capital category, broadly defined. Finally, movements of United States and foreign currencies may be regarded as migrations of short-term capital, currency imports corresponding to non-interest-bearing short-term notes, thereby necessitating an export of funds in payment for them.

Similar examples of short-term capital exports might be further enumerated. Imports would be merely of an opposite character. Manifestly, the volume of international short-term credits and the consequent movement of funds from day to day are always subject to variation because of seasonal and cyclical fluctuations of business activity in different countries. Important as the flows of short-term capital and the related movement of funds because of them are in international finance, they remain to a large extent unmeasurable. Only a limited number of facts are available to suggest the net direction of payments from year to year, necessitating the assumption that the outlines of the permanently floating mass can in this way be traced. The absolute amounts flowing each way undoubtedly mount up to enormous figures.

The few facts which are available in the balance of payments estimates may be consulted in Appendix A. The items which should be noted are: United States currency, imported and exported, short-term interest payments and receipts, indicated figures of net short-term capital and net unaccounted-for credits and debits. While the inclusion of the net unaccounted-for figures may be questioned, there are large errors involved in estimates of short-term capital movements as well as in those for long-term capital. The net unaccounted-for items, therefore, may be regarded as the

"catch all" for these errors and also for errors and omissions in the other estimated items.

Indicated Short-Term Capital Migrations

Beginning in the middle of 1922, efforts were made by the Department of Commerce to obtain formal estimates of the year to year net flow of short-term capital because of variations in the open-book credits extended by exporters and utilized by importers, and movements of international bank balances. Previous estimates had been made in 1921 by Professor J. H. Williams to accomplish the same end, but Department of Commerce figures in 1922 indicate the incompleteness of the former's survey. Adjustments in available figures, however, suggest that there was a net short-term capital outflow amounting to $985 millions in 1920 and $435 millions in 1921,[1] as against a net inflow of $375 millions determined by the Department of Commerce in 1922.

From 1923 to 1927 the Department of Commerce made no further surveys of open-book credits,[2] but included only changes in banking balances, with the conclusion that there was a minor net inflow of $3 millions in 1923, a larger one of $216 millions in 1924, a net outflow of $61 millions in 1925, and a net inflow again in 1926 of $359 millions. In 1927 it was concluded that there was no net change, while in 1928 a net outward movement of $170 millions was estimated. The 1928 figure was based upon revised banking returns for the end of 1927, which show much larger foreign balances and funds in the United States than were shown at the end of 1926.

Obviously, either the 1928 returns are in error (and the probability is that the error is not large) or prior estimates

[1] Professor Williams' figures for 1920 have been revised upward on the basis of the proportion his figures for 1921 represented of the Department of Commerce figures for the same date which were compiled one year later, and the changes in the international short-term accounts from the June 25, 1919, figures by the Federal Reserve Board (see Table 8 of this volume). The 1921 figure is based upon the status of short-term accounts for 1920 so estimated compared with the Department of Commerce figure for 1921. See footnote 29, Appendix A of this volume.

[2] In recent balance of payments estimates allowance for changes in open-book credits has been made by an adjustment "for differences in year-end lags." These estimates indicate an outward movement of $13 millions in 1922, $48 millions in 1923, $17 millions in 1924, $20 millions in 1926 and $55 millions in 1928, and an inward movement of $35 millions in 1925 and $19 millions in 1928.

were seriously defective. The latter was doubtless the case. A small net inward flow of such short-term funds may have occurred in 1927, the inflow in 1926 may have been much larger, there may have been no outflow in 1925, and finally, short-term capital imports in 1922, 1923 and 1924 may have been larger, or the estimates of the outflow in 1920 and 1921 are too large.[1] More than likely, a cumulative error has occurred. In any case, at the end of 1928, foreigners had deposits, bank loans to Americans and other funds in the American market aggregating $2,758 millions, against American deposits abroad, bank loans to foreigners and funds in foreign markets totalling $828 millions.

Short-Term Capital Movements Evidenced by Bankers' Acceptances

In 1928, for the first time, the Department of Commerce estimated the net change in bankers' acceptance credit outstanding, a matter which is rife with complexities. Foreigners, for example, become liable to American banks when American banks accept bills drawn by them to finance American imports, goods in transit or storage, or dollar exchange. Foreigners also become liable to American banks when the latter accept bills for them drawn by Americans to finance exports of goods in transit or storage or dollar exchange. The opposite is true when acceptance credit is extended to Americans by foreign banks. Finally, when acceptances are drawn by Americans for any purpose, are accepted by foreign banks but are discounted in the United States, both a liability of foreigners to Americans and Americans to foreigners is created to an equivalent sum.

According to the Department of Commerce figures for short-term capital movements in 1928, there was a net outward flow of acceptance credit amounting to $57 millions, excluding acceptance credit drawn by Americans to finance American exports and also acceptance credit drawn by foreigners and executed by foreign banks to finance American imports. When these items are included, however, $54 millions are added to the net export of acceptance credit.

[1] The 1920, 1921 and 1922 estimates are based upon mid-year figures, while later estimates are based upon the status of international accounts at year ends.

TABLE 14: VOLUME OF BANKERS' ACCEPTANCES TO FINANCE INTERNATIONAL TRADE OUTSTANDING IN THE UNITED STATES AT THE END OF EACH YEAR, 1920–1928, AND THE INDICATED NET DIRECTION OF THE ACCEPTANCE CREDIT FLOW

(Source: American Acceptance Council)[1]
(In millions of dollars)

	Acceptances Outstanding to Finance Exports	Acceptances Outstanding to Finance Imports	Acceptances Outstanding to Finance Goods in Storage or Foreign Transit	Acceptances Outstanding to Finance Dollar Exchange	Total Acceptances Outstanding to Finance International Trade	Increase or Decrease in Acceptances to Finance International Trade Indicating Net Direction of Acceptance Credit Flow
1920	..	..	..	..	750[2]	0
1921	..	..	..	..	450[2]	−300
1922	..	..	..	..	450[2]	0
1923	..	..	..	..	488[2]	+38
1924	305	292	..	23	620	+132
1925	297	311	17	19	644	+24
1926	261	284	40	26	611	−33
1927	391	313	130	28	862	+251
1928	497	316	243	39	1,095	+233

[1] "Bankers' Acceptances," 1928, pp. 27 and 29, and the *Acceptance Bulletin*, Vol. II, January 31, 1929, p. 18.

[2] Figured conservatively at 75% of the total estimated volume of all acceptances outstanding in the United States.

Estimating the net export during 1927 on the basis of the 1927 and 1928 figures of the Department of Commerce and the year end figures of the American Acceptance Council for acceptances to finance international trade, there was probably a net export of about $145 millions. Estimates for earlier years might be made but they would have even less basis in fact. Nevertheless, a crude idea of the direction of the acceptance credit flow may be gathered from Table 14. No significance can be attached to the actual figures, however. It should be remembered that some acceptance credit must have been extended to Americans in each year by foreigners, although the amount was probably not large and may have been negligible until relatively stable monetary conditions obtained abroad.

Short-Term Interest

Just as interest payments on long-term capital may be combined with other long-term capital movements in order to

judge the entire net movement of all capital payments, interest payments on short-term capital may be similarly treated. Naturally, the amount of funds so moving varies with the volume of acceptance credit granted by this market and with the status of the international banking accounts. Owing to the incompleteness of past surveys of short-term credit movements, a large error has necessarily appeared in short-term interest payments. The direction and even the volume of the net movement, nevertheless, may be approximately correct. It was slightly outward in 1920, inward in 1921 and 1922 and outward thereafter to the successive amounts in millions of $10, $7, $19, $21, $21 and $42.

Net Unaccounted-for Items

Before the estimation of America's balance of payments had acquired a semblance of precision, the "net unaccounted-for" item was regarded not only as a "catch all" for errors and omissions but as a fair index of the movement of short-term capital funds. In view of the conspicuous accumulation of error in estimated changes in short-term international banking deposit and loan accounts, it would appear reasonable to regard "net unaccounted-for" largely as representing omissions of short-term capital. This is the assumption employed, an assumption partially supported by the assertion in the 1928 balance of payments study of the Department of Commerce that approximately 60% of the net unaccounted-for amounts are probably due to errors in capital estimates. Accordingly, it may be concluded that in 1921 in particular there was a large inflow of unaccounted-for short-term capital, an inflow coinciding with a contraction of acceptance credit to finance international trade, in 1922, 1925 and 1926 small inflows, and in 1927 and 1928 small outflows.

The Movement of Currency

Account should be taken finally of the movements of currency which are tantamount in character to opposite flows of short-term capital funds for the purchase of non-interest bearing notes. While this usage is arbitrary, it is useful insofar as it helps to clear up the entire movement of capital.

Available data on currency movements, however, are by no means complete and cover only transfers of United States currency. Foreign currencies also move in and out of the United States but in indeterminate volume. Probably the imports and exports ordinarily cancel out, although during the early post-war years, characterized by currency disorganizations, there were probably import balances owing to American speculation in the currencies of the more important European countries in anticipation of a rise in their values,[1] which, however, may have been offset to a large extent by European purchases of American currency, an assumption which may appropriately be applied to the years 1920 and 1921.

Before looking more directly at the movement of American currency, it may be recalled that a large amount had been exported to all countries, particularly European, during the war period. In 1920 a further sum of $103 millions was exported to Cuba.[2] The year 1921, whatever the exports, saw a large return of American currency, mainly from Europe, estimated at around $100 millions net.[3] The subsequent two years are said to have witnessed a net outward flow amounting to $40 millions and $50 millions respectively, owing to the favor it was accorded in countries experiencing depreciated currencies.[4] Although exports continued thereafter, imports exceeded exports in 1924 by an amount estimated at $20 millions and in 1925 at $30 millions, while in 1926, 1927 and 1928 currency movements are assumed to have cancelled out or to have been relatively minor.[5]

[1] From 1919 to the middle of 1922, Germany is said to have sold 3.5 billion marks in currency abroad, chiefly in the United States, netting her perhaps $100 millions. See H. G. Moulton and C. E. McGuire, "Germany's Capacity to Pay," New York, 1923, pp. 80–9. Other currencies are known to have been bought in volume.

[2] Williams, "The Balance of International Payments of the United States for the Year 1920," *op. cit.*, p. 184.

[3] *Federal Reserve Bulletin*, Vol. 7, Nov. 1921, p. 1263.

[4] In this connection, see the U. S. Department of Commerce balance of international payments studies for 1923 and 1924, *Trade Information Bulletins*, No. 215, p. 7, and No. 340, pp. 6–7.

[5] See also the U. S. Department of Commerce balance of international payments studies for 1925, 1926 and 1927, *ibid.*, No. 399, pp. 8–9; *ibid.*, No. 503, pp. 43–4; and *ibid.*, No. 552, pp. 51–2. Available statistics suggested a net importation of United States currency in 1925 of $62 millions, in 1926 of $41 millions, and in 1927 of $45 millions, but the figures were regarded as too unreliable to be entered without modification in 1925 and to be included at all in 1926 and 1927 balance of payments tables.

The Net Flow of All Short-Term Capital and Credit

When all the aspects of the short-term capital flow mentioned are collectively regarded, it is possible to get an approximate conception of its net direction, although no precise idea of the net volume or the year to year increase or decrease in the actual movement of funds connected with it can be obtained. Apparently, there was in 1920 a huge outward stream of all short-term capital, but in 1921, it is impossible to discern a very large outward current owing to the probable liquidation of international acceptance credit previously extended by the American market. It is also difficult to discover a strongly marked net stream in 1923, 1925 and 1927, but in 1922, 1924 and 1926 it was mainly inward. Although an increase in international acceptance credit extended in 1924 by the United States may have offset the inward flow of that year, the 1922 and 1926 inflows may have been around $500 millions or more. In 1928, on the other hand, a large net outflow may be definitely concluded.

A careful review of the various constituents of the short-term capital migration reveals that the most important factor making for an inflow after 1922 was additions to foreign bank balances in the United States. Inflows on this account were of course modified and in cases offset by other factors, as the withdrawal of American bank balances from foreign countries because of unsettled conditions, the movement resulting from acceptance financing of international trade, the short-term interest flow, the unaccounted-for capital flow and finally, the movement in connection with currency imports and exports. Nevertheless, notable aspects of the accumulation of foreign balances are extremely significant.

A portion of them came to the United States for temporary employment because of unstable monetary conditions and represented a flight of capital from foreign money markets, an influence of unquestioned importance in some instances as late as 1927. But the accumulation of foreign bank deposits was not entirely of this character. Some of it represented foreign funds transferred to this market for the acquisition of American properties, the purchase of securities, or for uses in trade, temporarily unemployed. Others represented ac-

cumulations from the proceeds of foreign borrowing, and still others accumulations by foreigners for the purpose of meeting dividend, interest, sinking fund and other redemption requirements to American investors. Finally, the growth of foreign bank deposits in the United States represented an increase of current accounts of foreign central banks, a development meriting special attention.

During the major period of world monetary instability, foreign central banks instituted and widely pursued policies of keeping deposit balances in the United States as the strongest gold center. Stabilization programs necessitating exchange market control or contemplating the eventual withdrawal of American gold were major reasons for these central bank balances. They also resulted in part from a change in central banking practices, namely, that of keeping excess gold as earning assets in foreign countries,[1] or a portion of the legal gold reserves, which has been commonly permitted in post-war central banking law enactments by smaller countries and even such important ones as Belgium, Italy and Germany.[2]

American balances of foreign central banks alone were said to have amounted to around a billion dollars by the middle of 1927, and are generally estimated at but slightly below that figure at the present time.[3] To a certain extent they were accumulated directly by borrowing of the foreign central bank itself or by its government. To a larger extent they were accumulated through the absorption of the proceeds of American loans floated by various borrowers of their countries and offered to them in exchange for domestic currencies. They were also obtained from a return of capital funds abroad when the success of stabilization programs became fully evident and merely constituted the transfer of balances held before by individual foreigners, financial institutions and corporations.

Tracing the movement of foreign bank deposits in the

[1] League of Nations, "Memorandum on Currency and Central Banks, 1913–1925," Geneva, 1926, pp. 64–5.

[2] See Appendix B of this volume.

[3] *Federal Reserve Bulletin*, Vol. 13, June, 1927, pp. 372–3, and J. M. Keynes, "The British Balance of Trade, 1925–1927," *The Economic Journal*, London, Vol. 37, Dec., 1927, pp. 560–1.

United States, it may be said that 1920 and 1921 witnessed a sharp liquidation of them. Their subsequent increase at first reflected largely a flight of capital from abroad. The necessity for drastic action by central banks to control exchange markets and effect monetary stability was leading them to accumulate American balances and part of the gold shipments to the United States so prominent before 1924 was made to accomplish this end. From 1924 on, when effective stabilization was becoming apparent, the transfer home of the balance of individuals, financial institutions and corporations added to central bank balances in the United States. Notwithstanding, the balances of other than foreign central banks remained important. The growth of America's creditor position necessarily involved larger liquid balances of foreign debtors for dividend, interest, sinking fund and bond redemption purposes. Moreover, the growth of new foreign loans probably involved a larger and larger "hang-over" of loan proceeds until utilized by borrowers. The existence of the highly speculative conditions in American markets also attracted foreign funds for participation, and many of them were probably represented as bank deposits until finally employed or until such time when American investments of foreigners were turned over.

The fact that foreign balances of Americans did not increase concurrently with those of foreigners in the United States is easily explained. Despite higher short-term money rates in principal European markets until 1925, the monetary outlook was too unsettled to attract American funds in volume even at the interest rates obtaining. Even after 1925, American short-term funds abroad did not increase, owing to the volume of speculative activity at home, while in 1928, when American short-term interest rates began to converge with principal foreign rates, there was every reason for funds to remain at home.

To sum up, forces making for the accumulation of foreign balances in the United States were more potent throughout the period than those making for the growth of American balances abroad. As a consequence, in spite of the growing liability of foreigners to Americans for banker's acceptance credit, notably in 1927 and 1928, the United States, while

accumulating long-term foreign investments, was also becoming a debtor on short-term capital account.

The Net Migration of All Funds on Capital Account from 1920 to 1928

Definite estimates of the entire movement of funds on capital account in and out of the United States cannot be made, but generalization in the light of the foregoing analysis can be offered as to the net direction of the flows from year to year. These generalizations appear in Table 15. They are based upon the figures arrived at earlier for net exports and imports of funds on long-term capital account, and the broad inferences upon the net flow of short-term capital.

Taking the nine years from 1920 to 1928 together, the trend may be described as follows: In 1920 there was actually a large net outflow of international payments on all capital account, and a smaller outflow in 1921. The year 1922, however, witnessed a considerable net inflow which in 1923 was even larger. Although minor net outward streams (or possibly inward) appeared in 1924 and 1925, the main direction was again inward in 1926 only to be slightly reversed in 1927. Finally, in 1928, the entire net movement was clearly outward.

When the entire movement of all international payments on capital account is viewed, the only adequate basis for judgment conceivable, the conclusions reached at an earlier stage are further supported. The export of American capital funds for long-term investment was largely made possible by an offsetting inflow due to American investments of foreigners and more largely to the ever increasing amount of interest, dividends and principal repayment received in successive years. Nevertheless, there was a net outflow of all payments on long-term capital account in 1920, 1921, 1922 and 1924. It now appears that even in 1922 and 1924 when important net outflows of payments on long-term capital account last occurred they were offset and in 1922 exceeded by a net immigration of payments on short-term capital account. In 1926, moreover, when long-term capital payments were generally inward, the net flow of short-term capi-

Table 15: The Entire Net Movement of Payments on Capital Account Reflected by the Balance of International Payments of the United States, 1920–1928

(Source: U. S. Department of Commerce and the National Industrial Conference Board)

Year	Direction and Amount of the Net Flow of "Payments" on Long-Term Capital Account	Direction of the Net Flow of Indicated Short-Term Capital "Payments"	Conclusion on the Entire Net Movement of "Payments" on Capital Account
1920	Outward to $851 millions	Outward to a very large amount	Outward, the net volume being more than double the net outward flow on long-term capital account
1921	Outward to $290 millions	A net outward flow	The net flow was chiefly outward
1922	Outward to $102 millions	Inward to a large sum	The net inflow on short-term capital account greatly exceeded the outflow on long-term capital account
1923	Inward to $755 millions	Approximately a balance	A net inward current because of payments on long-term capital account
1924	Outward to $89 millions	Inward	Outward payments on long-term account were only slightly more than inward payments on short-term account, if they exceeded them at all
1925	Inward to $105 millions	Probably outward	The combined net stream may have been either slightly inward or outward
1926	Inward to $148 millions	Inward to a large amount	The entire net movement of capital payments was predominantly into the United States
1927	Inward to $51 millions	Approximately a small outward movement	There could have been only a small net outward movement of all capital funds
1928	Inward to $39 millions	Outward	The entire net movement was outward, probably to a fairly large amount owing to the movement of payments on short-term capital account

tal payments augmented them greatly. Finally, in other years, except in 1923, when long-term capital payments were inward, they were offset by the outward movement of all short-term capital payments, especially marked in 1928.

It would appear therefore that the export of American capital funds for foreign investment purposes, concerning

which so much has been said and some alarm expressed, has by no means constituted an exhaustive drain upon the American capital market. On the contrary, investment capital funds going abroad have been in many years more than replaced by other funds on capital account coming in. Sweeping condemnation of American foreign investment on the grounds of depriving domestic industry of its own needs, consequently, is wholly irrelevant, an inference which is further sustained by the evidence contained in Chapter VI.

CHAPTER V

AMERICA'S BALANCE OF INTERNATIONAL PAYMENTS AND INTERNATIONAL FINANCIAL POSITION AS A WHOLE

IN THE last chapter the nature of the recent movements of all capital payments in and out of the country was analyzed in order to gain an adequate understanding of them and to correct common notions regarding the actual net flow. The next step will be to relate various capital migrations to the movement of America's merchandise and service payments, and to connect them with the balance of payments as a whole. It will then be feasible to appraise the entire international financial position of the United States as it has appeared in the last few years. The present chapter, therefore, will be divided into two distinct but related parts, which may be regarded essentially as a continuation of Chapter IV.

America's Balance of International Payments as a Whole

In presenting the statistical records of America's post-war balance of international payments, the same general organization used in previous balance of payments tables has been retained, although only a rough comparison with them is permissible because the later tables are far more complete. In Table 16 appears a summary of the major classes of transactions, while the material upon which it is based is contained in Appendix A. Table 17, presenting the percentage distribution of the various classes of payments, and Table 18 giving their net balances, further summarize Appendix A as well as simplify Table 16.

Taken altogether, the various balance of payments statements for recent years are remarkably complete and the

estimates upon which they have been compiled have been carefully made. In only two years, 1920 and 1921, are many of the estimates largely arbitrary, but in these years the

TABLE 16: SUMMARY OF THE MAJOR CLASSES OF ITEMS IN THE ESTIMATED BALANCE OF INTERNATIONAL PAYMENTS OF THE UNITED STATES, 1920–1928

(Sources: U. S. Department of Commerce from 1922 to 1928.[1] Provisional compilation for 1920 and 1921 by the National Industrial Conference Board)[2]

(In millions of dollars)

Year	Credits, Reflecting Payments into the United States							
	Total	Merchandise Exports	Gold Exports	Securities and Other Claims to Wealth	Interest Receipts	U. S. Government Receipts from War Debts and Credits	Service, Exports	Unfunded Credits and Net Unaccounted for
1920	10,954	8,525	364	860	450	57	698	..
1921	6,661	4,683	51	425	509	131	543	319
1922	6,627	4,021	41	804	555	226	560	420
1923	6,762	4,368	34	890	594	301	572	3
1924	7,659	4,834	108	1,041	635	194	631	216
1925	8,317	5,177	277	1,337	689	186	615	36
1926	8,842	5,044	166	1,585	740	195	705	407
1927	9,160	5,091	384	1,933	800	206	746	..
1928	10,648	5,334	629	2,857	882	210	736	..

Year	Debits, Reflecting Payments out of the United States							
	Total	Merchandise Imports	Gold Imports	Securities and Other Claims to Wealth	Interest Payments	U. S. Government Advances and Credits	Service, Imports	Unfunded Credits and Net Unaccounted for
1920	10,954	5,778	393	1,725	135	246	1,664	1,013
1921	6,661	2,859	696	1,273	120	85	1,193	435
1922	6,627	3,432	275	1,498	144	53	1,225	..
1923	6,762	4,162	329	836	180	..	1,217	38
1924	7,659	3,952	324	1,846	192	..	1,285	60
1925	8,317	4,544	175	1,983	229	..	1,325	61
1926	8,842	4,766	238	2,206	268	..	1,364	..
1927	9,160	4,508	230	2,691	281	..	1,403	47
1928	10,648	4,497	357	3,652	359	..	1,517	266

[1] Based on information furnished by Ray O. Hall, Assistant Chief, Finance and Investment Division, Bureau of Foreign and Domestic Commerce. Arrangement and classification according to Appendix A.

[2] See Appendix A for sources.

more adequate figures for later periods served as a guide. Nevertheless, discrepancies must be granted for every year. It is not unlikely that more complete or accurate information would alter somewhat the percentage distribution of the

major classes of items in Table 17. A margin of error, therefore, should be assumed for each computation. Nor is it improbable that the net balances in Table 18 are at fault,

TABLE 17: THE PERCENTAGE DISTRIBUTION OF THE MAJOR CLASSES OF ITEMS IN THE ESTIMATED BALANCE OF INTERNATIONAL PAYMENTS OF THE UNITED STATES, 1920–1928

(Sources: U. S. Department of Commerce from 1922 to 1928.[1] Provisional compilation for 1920 and 1922 and computations by the National Industrial Conference Board)[2]

Year	Credits, Reflecting Payments out of the United States							
	Total	Merchandise Exports	Gold Exports	Securities and Other Claims to Wealth	Interest Receipts	U. S. Government Receipts from War Debts and Credits	Service Exports	Short-Term Credits and Net Unaccounted for
	%	%	%	%	%	%	%	%
1920	100.0	77.8	3.3	7.9	4.1	0.5	6.4	..
1921	100.0	70.3	0.8	6.3	7.6	2.0	8.2	4.8
1922	100.0	60.7	0.6	12.1	8.4	3.4	8.5	6.3
1923	100.0	64.6	0.5	13.2	8.8	4.5	8.4	[3]
1924	100.0	63.2	1.4	13.6	8.3	2.5	8.2	2.8
1925	100.0	62.3	3.3	16.1	8.3	2.2	7.4	0.4
1926	100.0	57.0	1.9	17.9	8.4	2.2	8.0	4.6
1927	100.0	55.6	4.2	21.0	8.8	2.3	8.1	..
1928	100.0	50.1	5.9	26.8	8.3	2.0	6.9	..

Year	Debits, Reflecting Payments out of the United States							
	Total	Merchandise Imports	Gold Imports	Securities and Other Claims to Wealth	Interest Payments	U. S. Government Advances and Credits	Service, Imports	Short-Term Credits and Net Unaccounted for
	%	%	%	%	%	%	%	%
1920	100.0	52.7	3.6	15.8	1.2	2.2	15.2	9.3
1921	100.0	42.9	10.5	19.1	1.8	1.3	17.9	6.5
1922	100.0	51.8	4.1	22.6	2.2	0.8	18.4	..
1923	100.0	61.5	4.9	12.3	2.7	..	18.0	0.6
1924	100.0	51.6	4.2	24.1	2.5	..	16.8	0.8
1925	100.0	54.7	2.1	23.8	2.8	..	15.9	0.7
1926	100.0	53.9	2.7	25.0	3.0	..	15.4	..
1927	100.0	49.2	2.5	29.3	3.1	..	15.4	0.5
1928	100.0	42.2	3.4	34.3	3.4	..	14.2	2.5

[1] See Appendix A. [2] *Idem.* [3] Less than $\frac{1}{10}$ of one per cent.

although omissions and errors on both sides might cancel out. Only an approximate consistency between the various years can be assumed in employing the data collectively in the subsequent analysis.

Table 18: Net Balances of Major Classes of Items in the Balance of International Payments of the United States, 1920–1928

(Credit balance+ and debit balance−; or net payments into the United States+ and net payments out of the United States−)

(Sources: U. S. Department of Commerce from 1922 to 1928.[1] Provisional compilations for 1920 and 1921 by the National Industrial Conference Board)[2]

(In millions of dollars)

Year	Merchandise	Gold	Securities and Other Claims to Wealth	Interest Payments or Receipts	Government Advances and Debt Receipts	Service Payments or Receipts	Short-Term Credits and Net Unaccounted for
1920	+2,747	−29	−865	+315	−189	−966	−1,013
1921	+1,824	−645	−848	+389	+46	−650	−116
1922	+589	−234	−694	+411	+173	−665	+420
1923	+206	−295	+54	+414	+301	−645	−35
1924	+882	−216	−805	+443	+194	−654	+156
1925	+633	+102	−646	+460	+186	−710	−25
1926	+278	−72	−621	+472	+195	−659	+407
1927	+583	+154	−757	+519	+206	−657	−47
1928	+837	+272	−795	+523	+210	−781	−266

[1] See Appendix A. [2] *Idem.*

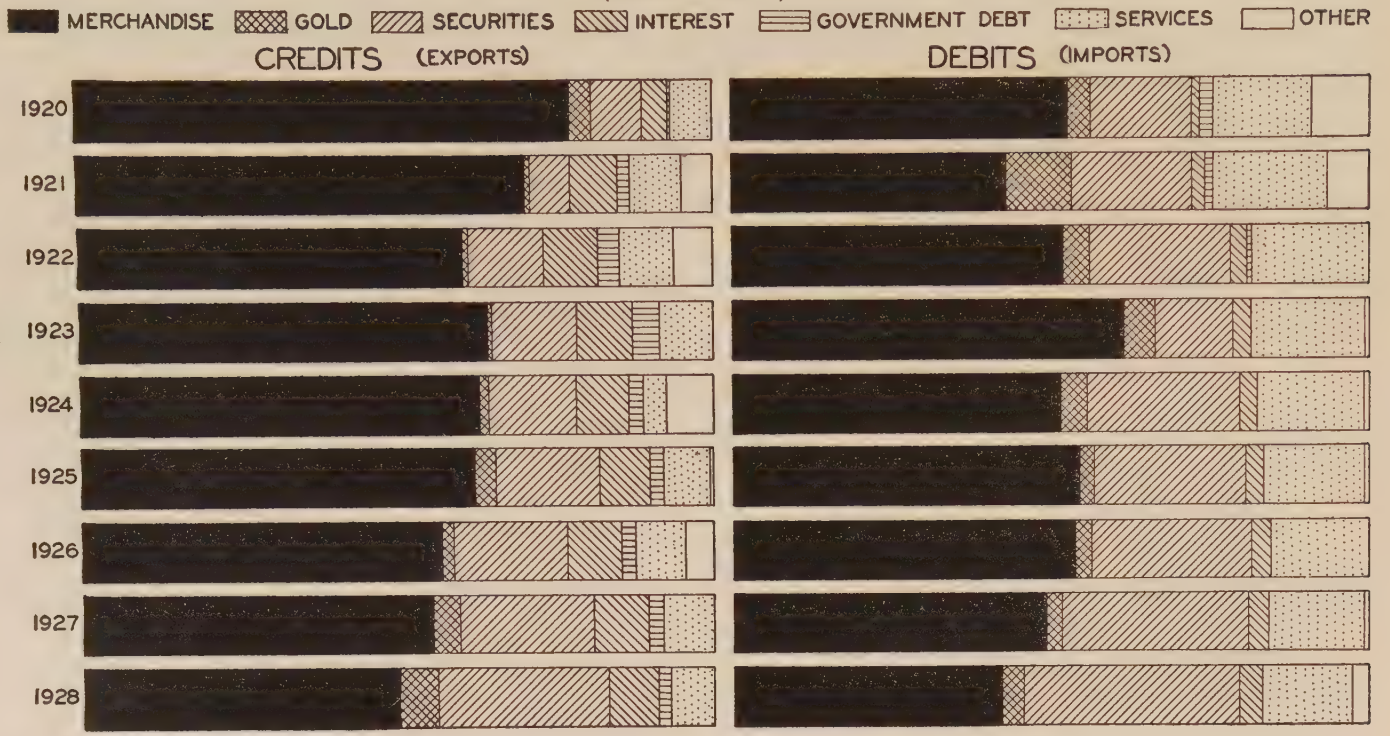
The Altering Character of America's International Transactions

Before proceeding further, it is worth while to observe the amazing complexity of America's typical international transactions. With the fall of prices and world-wide depression which began in 1920, they naturally experienced a contraction in 1921 in terms of monetary values, especially those concerned with merchandise. Nevertheless, an expansion followed in subsequent years. The particular directions which it took can be observed in the absolute figures of Table 16 and Appendix A, but they are more clearly apparent in the percentage distribution given in Table 17 and Chart 2.

While these shifts need not be pointed out in detail, several features merit a special note. Most significant of all the changes in both credit and debit items was the increasing importance of purely financial dealings and the decreasing importance of merchandise transactions. This trend, moreover, became more conspicuous in later years and was more notable for the credits than for the debits. Its development distinctly obscured any relationship between movements of

CHART 2: THE PERCENTAGE DISTRIBUTION OF THE MAJOR CLASSES OF ITEMS IN THE ESTIMATED BALANCE OF INTERNATIONAL PAYMENTS OF THE UNITED STATES, 1920–1928

(Source: Table 17)



merchandise and flotations of new securities which has been so commonly believed as having obtained.

The varying percentage weight possessed by gold exports and imports is accounted for by their very nature. Gold imports were of unusual importance during the period of world monetary instability, when the United States alone of the larger countries maintained a gold standard. In 1925 and 1927, years in which notable recovery of foreign gold standard conditions was occurring, exports formed a larger percentage of the total, as they did also in 1928. Since the total credits and debits were of such size, the absolute volume of these gold movements was not extraordinarily large. They were of unusual character, however, owing to the breakdown of the gold standard system. Because of the conventional position of gold as the basis of the country's monetary and credit system, they had far-reaching influences upon America's finance, trade and industry, much greater than their percentage figures would indicate. Necessarily, a more extended analysis of them is required than can be given here. This is made in Chapter VI.

For the immediate purpose, gold exports and imports may be considered together with merchandise, and the percentage distribution and net balances of the two modified accordingly. A definite trend is thus revealed between the international movements of visible and invisible or tangible and intangible items, the former decreasing in percentage significance and the latter increasing. Essentially, this is a correct procedure, because gold flows occurring as a result of the operation of the gold standard mechanism may be regarded as a temporary expedient for enlarging exports or imports of goods when a lack of balance in a country's international payments requires prompt adjustment. It is also justifiable when gold flows occur for commercial reasons or at the direction of a central bank or a government. The former correspond to shipments of goods and the latter take place in anticipation of, or immediately because of, a condition of unbalanced international payments.

Gold movements at the direction of central banks or governments have been far the more important in post-war years because of the disruption and slow recovery of the

gold standard abroad. The United States was the only country maintaining a free gold center throughout the entire period. Gold embargoes existed in every other important country until the final reestablishment of foreign monetary standards based on gold; and even after, gold movements were often directed. They took place, therefore, not as a result of the activities of private international bankers, but largely because of the initiative taken by foreign central banks and governments—imports into the United States occurring in order to settle their American commitments or to establish balances for the purpose of exchange market control, and exports because gold was needed in connection with stabilization programs or because dollar balances of foreign central banks or governments were regarded as unnecessarily large.

Invisible transactions reflected in the international accounts include not only those of a purely financial character but also those having to do with services imported and exported. While purely financial payments expanded notably in significance relative to all others, payments for services were almost constant in their comparative importance. There was, however, a very gradual downward trend apparent for both imports and exports after 1922. Owing to the fact that service transactions were such a regularly large percentage of the debits, averaging over 16%, and because they were a moderately large proportion of the credits, they must have a prominent place in the subsequent discussion of the connection between capital and other international payments.

The Balances of All Trade and Financial Dealings

The relationship between financial and other types of international payments can be analyzed most satisfactorily from the net balances of the major classes of accounts. These appear in Table 18. They are further illuminated by Charts 3 and 4, presenting three groups of curves in each. The first group on Chart 3 shows the movement of combined merchandise and gold exports and imports; the second group includes curves for service exports and imports; and the third compares the net balances of merchandise and gold with that

CHART 3: THE MOVEMENT OF THE VISIBLE AND INVISIBLE TRADE OF THE UNITED STATES, 1920–1928

(Sources: Tables 16 and 18)

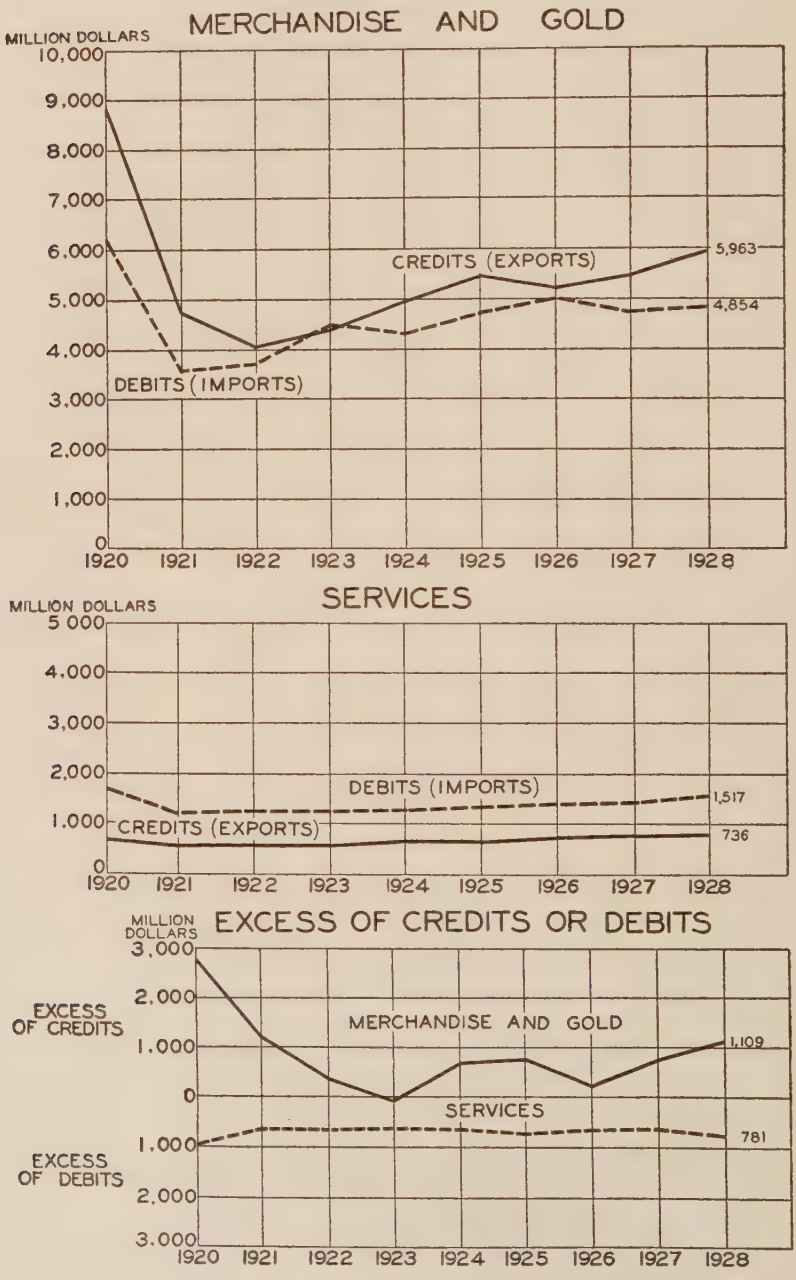
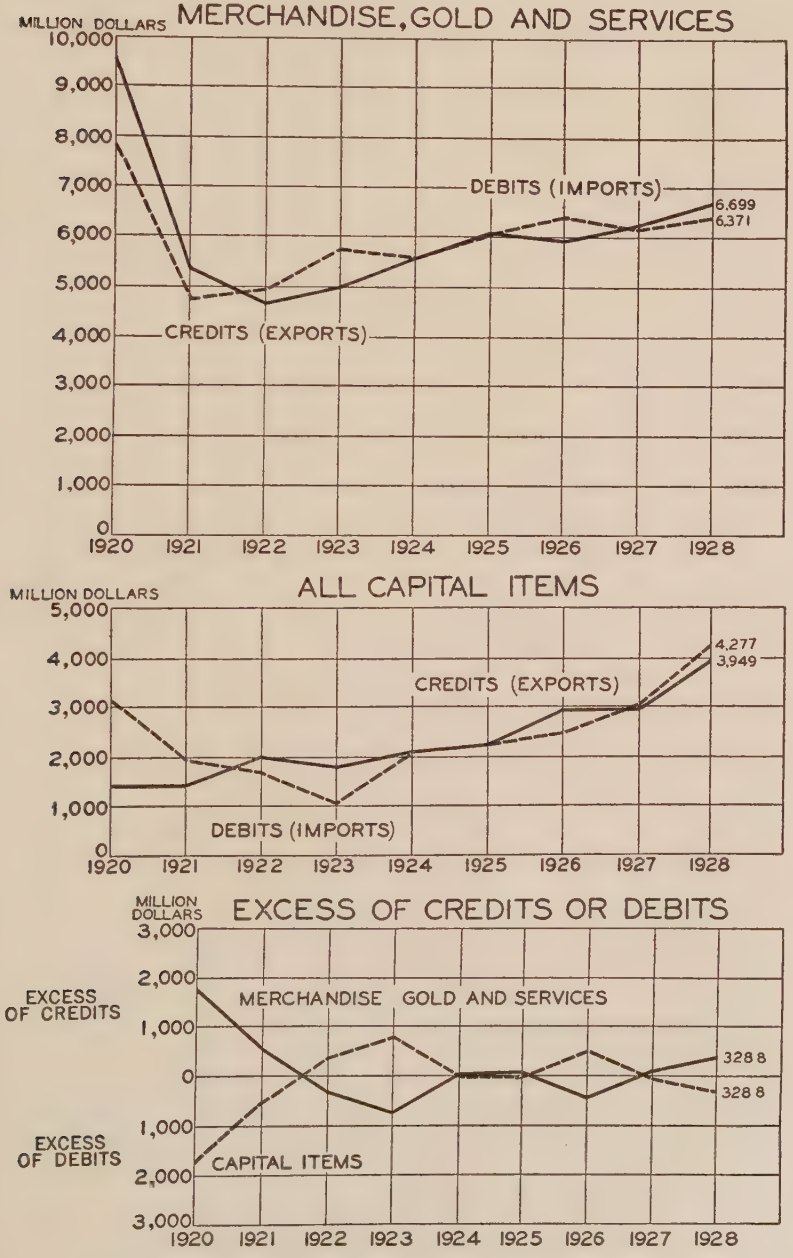


CHART 4: THE MOVEMENT OF ALL TRADE AND CAPITAL PAYMENTS OF THE UNITED STATES, 1920–1928

(Sources: Tables 16 and 18)



for services. In the first group of Chart 4, merchandise, gold and service exports and imports are combined; the second group includes curves for all debit and credit capital items of the balance of payments tables; and the third group is a comparison of the net balance of all trade and the net balance of all capital items. Owing to the probability of many cumulative errors in various estimates of balance of payments, particularly for all financial and service items, the movements of the various curves must be regarded only as approximations.

In every year since the war the United States has exported more merchandise than she has imported, and in 1928 this favorable balance of trade amounted to over one billion dollars. Of course, in many years, the net flow of gold reduced the combined export balance, but in 1925, 1927 and 1928, it added to it. The persistent appearance of large export trade balances has been widely commented upon as a notable sign of American prosperity. Furthermore, commentators have often taken the opportunity to link them to the large number of new foreign securities offered in American markets, to show thereby how the country has been benefited by loans to foreigners.[1] America has been an exporter of capital, it has been argued, and there is an obvious connection between an export of capital and a favorable balance of trade.

The purpose here, as throughout this study, is to clarify the character of such correlations, and not in any sense to criticize them. If it were actually true that the United States were exporting funds on new capital account exceeding all other capital payments by as large an amount as the flotations of new foreign issues would indicate, quite possibly a direct relationship could be traced between the movement of such funds out of the country and the favorable balance of trade. Transfers of capital have to be made possible in some manner in case loans are extended, and movements of goods are most commonly accepted as the practical medium of transmission.

[1] B. M. Anderson, "Two 'New Eras' compared: 1896–1903 and 1921–1928," *Chase Economic Bulletin*, Vol. IX, Feb. 11, 1929, p. 23; and Max Winkler, "The Dollar Abroad," *Foreign Policy Association Information Service*, Vol. V, Supplement No. 1, March, 1929, p. 2.

It was concluded in the last chapter, however, that while there was a net outflow of all funds on long-term capital account in early post-war years, it was of declining volume, and that in 1923 and thereafter, excepting 1924, the movement was inward. Moreover, even in 1924, when there was a net outflow, a net inflow of short-term capital funds largely offset it. In 1926 the net inward stream of payments on short-term accounts augmented greatly the net immigration of all funds on long-term account. Finally, in 1925, 1927 and 1928 the net flow of payments on short-term account probably caused a net outward movement of all capital payments, especially notable in 1928. How can these facts be reconciled with a constantly favorable balance of merchandise trade?

Reference to Charts 3 and 4 which summarize the material of Table 18 provides an answer. It was simply because of the enormous net balance of outward payments to foreigners for services rendered to Americans. In other words, when service items are included with merchandise and gold in a composite balance of all visible trade of the country, as in Chart 4, this balance has not always been "favorable," but in some years has actually been "adverse"; that is, more merchandise, gold and services combined have been imported than exported. This was actually true in 1922, 1923 and 1926, and in 1924, 1925 and 1927, the balance was only slightly favorable, although in 1928, it was decidedly favorable.[1]

Thus, the question raised above is reversed. If the combined trade balances of merchandise, gold and services after 1921 were in some years unfavorable to the United States, how were they settled? They in turn were taken care of by the fact that the net movement of all capital payments was inward, a trend previously accounted for by foreign purchases of securities in the United States; by the growing net receipts of foreign payments on interest, dividend and capital repayment account; and by the expansion of the volume of short-term foreign funds residing in America.

[1] Excluding gold from the balance of all trade, there was a "favorable" balance of $1,781 millions in 1920, $1,174 millions in 1921, $228 millions in 1924 and $56 millions in 1928, and an "unfavorable" balance of $76 millions in 1922, $439 millions in 1924, $77 millions in 1925, $381 millions in 1926 and $74 millions in 1927.

Why the Balance of Service Payments Was Adverse to the United States

The enormous excess of outward over inward payments on service account is a phenomenon which merits closer attention. How was the United States importing more services than were being exported? Scrutiny of service receipts and payments in the various balance of payments statements, given in Table 19, suggests the ways.

TABLE 19: NET BALANCES OF MAJOR CLASSES OF SERVICE ITEMS IN THE BALANCE OF INTERNATIONAL PAYMENTS OF THE UNITED STATES, 1920–1928

(Credit Balance+ and Debit Balance−; or Net Payments into the United States+ and Net Payments out of the United States−)

(Sources: U. S. Department of Commerce from 1922 to 1928.[1] Provisional compilations for 1920 and 1921 by the National Industrial Conference Board)[2]

(In millions of dollars)

Item	1920	1921	1922	1923	1924	1925	1926	1927	1928
Freight services	+8	−27	−79	−83	−64	−84	−95	−66	−84
Service to governments	−100	−40	−46	−66	−53	−61	−49	−29	−57
Motion picture royalties	+30	+39	+48	+57	+66	+71	+71	+71	+64
Insurance and financial services	+33	+34	+49	+29	+58	+64	+91	+73	+69
Tourist services	−280	−300	−305	−280	−373	−410	−406	−444	−525
Immigrant remittances and charitable contributions	−655	−355	−330	−299	−284	−285	−264	−255	−241
Miscellaneous	−2	−1	−2	−3	−4	−5	−7	−7	−7
Net service balance	−966	−650	−655	−645	−654	−710	−659	−657	−781
Net tourist and immigrant remittance balance	−935	−655	−635	−579	−657	−695	−670	−699	−766
Net balance of all other service items	−31	+5	−20	−66	+3	−15	+11	+42	−15

[1] See Appendix A.

[2] *Idem.*

By far the largest single contributing item to the aggregate net balance was services purchased by American tourists traveling abroad. In 1928, it was necessary for Americans to remit a total of $782 millions for services rendered them in their travels by foreigners, an amount almost twice as large as their expenditure in 1920. The net balance underwent an equally large increase. Such an enormous expansion of payments to foreigners for tourist services cannot be regarded as abnormal. It is a logical development in view of the manifest importance of foreign trade, the value of for-

eign financial contacts, the tremendous expansion of interest in foreign culture and civilization, the emphasis in the teaching profession and educational fields on foreign travel, and finally, the expansion of money incomes of Americans after 1921, accompanying a comparatively stable cost of living price level.

The next important item in the huge adverse service balance is seen to have been in immigrants' remittances. These were extraordinarily swelled in early post-war years by remittances which had been deferred in the war period and by the additional sums then sent abroad for relief. Naturally, they have tended to decline with the passing of extraordinary circumstances and the pursuit of an immigration restriction program by the United States.

The net balance of other service payments and receipts becomes of minor significance when it is noted, in Table 19, that in every year they practically offset each other, with the exception of 1920, 1922 and 1923, when imports exceeded exports by $31 millions, $20 millions, and $66 millions respectively, and in 1927, when exports exceeded imports by $42 millions. The persisting net balance on service account of around $650 millions or $700 millions therefore has been due to the large net volume of tourist and immigrant remittances, the decline in the latter having been offset by the expansion of the former.

America's International Financial Position as a Whole

Although the net flow of all international payments on capital account has been variously outward or inward in recent years, the international creditor position of the United States has nevertheless been expanding as a result of the net flow of investment funds. Taken as a unit, the country has been largely reinvesting abroad income and capital repayment from former investments. At the same time, the nation has become a short-term debtor as a consequence of the flow of short-term funds and credits on short-term account. Hence, an appropriate conclusion to this and the preceding chapters is a summary outline of the contemporary financial position of the United States, an outline which will answer

a number of questions which must have arisen in the reader's mind from the foregoing analysis.

For example, just what is the probable aggregate of American foreign investment holdings according to the latest available figures? In the statement of the international financial position of the United States given at the end of Chapter III, it was seen that the capital debts of foreigners to Americans consisted in largest part of the obligations of foreign governments to the United States Treasury. Naturally, questions concerning their present status in the total creditor position are important. Have they been completely overshadowed by private American foreign investments? Again, there is the question of American capital obligations to foreign investors which must have increased in recent years. When allowance is made for them, how has the creditor position of the country altered? Finally, there is the problem of the actual short-term debtor position of the United States. How much is really owed to foreigners on short-term debtor account above that which foreigners in turn owe the United States? What, then, is the actual net creditor position of the country?

Changes in America's international financial position have been particularly notable in the last three years. The most useful picture that can be drawn, therefore, involves a comparison between them. Accordingly, figures for the end of 1926, 1927 and 1928 have been taken. Some of the data bearing on the nation's international short-term assets and liabilities for the end of 1926, however, are unsatisfactory and are necessarily omitted. Comparability between the estimates of the short-term accounts obtains, consequently, only for 1927 and 1928.

The Long-Term Creditor-Debtor Position of the United States

At the end of 1925, the Department of Commerce reckoned the accumulated holdings of foreign obligations and property titles of private American citizens and corporations to be about $10,405 millions.[1] According to revised balance of payments figures, $808 millions were added in 1926, $972 millions in 1927 and $1,339 millions in 1928, making totals

[1] *Trade Information Bulletin*, No. 319, p. 15.

of $11,213 millions, $12,185 millions and $13,524 millions.[1] In the opinion of some observers, these estimates are too small, but they are undoubtedly the most accurate that have been made. A range of one billion dollars above and below the total private investments at the end of each year should probably be assumed.[2]

Almost equal to the foreign obligations owed American interests were the nominal figures of the United States Treasury for the debts of foreign governments for war, sale of surplus war supplies and relief credits, amounting to $11,800 millions at the end of 1926, $11,872 millions at the end of 1927, and $11,853 millions at the end of 1928.[3] The total at the end of 1919 aggregated about ten billion dollars exclusive of accrued and unpaid interest[4] and slightly over $200 millions more was advanced in 1920.[5] Thus an addition of almost $1.5 billions occurred as the result of accrued and unpaid interest until the debts were funded and placed on predetermined payment schedules. There has been some increase due to the exercise of options by certain debtors to pay only part of the scheduled interest charges.

The funding process which began in 1923 under negotiations conducted by the World War Foreign Debt Commission resulted by the end of 1926 in effective agreements with thirteen of the principal debtors.[6] Since that time debts of other governments, excepting that of Russia, which has not been officially recognized, and that of Armenia, where no independent government exists, have been technically covered by funding arrangements.[7] Under these funding agreements, interest was arranged at varying average rates, e. g., 0.4% for Italy, 1% for Jugoslavia, 1.6% for France, 1.8% for Belgium, and 3.3% for others, with the exception of Austria and Greece where no separate interest schedule was speci-

[1] Information supplied by Ray O. Hall, Assistant Chief, Finance and Investment Division, Bureau of Foreign and Domestic Commerce, U. S. Department of Commerce.

[2] *Trade Information Bulletin*, No. 552, p. 20.

[3] United States Treasury, "Annual Report," 1926, p. 576; *ibid.*, 1927, p. 628; and *ibid.*, 1928, p. 560.

[4] *Ibid.*, 1920, pp. 65–7 and 330–7.

[5] See Appendix A of this volume.

[6] The agreement with France remains unratified, however.

[7] These funding agreements are fully discussed in Chapter VIII.

fied.[1] Obviously, these rates represent a considerable scaling down from the original rate of 5% nominally agreed upon in 1918 and subsequently applied to cash advances under the Liberty Bond Acts as well as to war supplies and relief credits.[2] From another point of view, they signify a cancellation of a portion of the principal. That is to say, a capitalization of the scheduled payments at a 5% interest rate would yield a principal much less than that nominally carried in the published Treasury accounts.

Assuming that 5% is the rate which would roughly approach the average at which the various debtor governments could borrow from private American investors—by no means a far-fetched hypothesis—it becomes clear that the creditor value of the debts of foreign governments to the United States should be the total of the present worth of all payments scheduled under funding agreements reckoned on a 5% interest basis. As for the unfunded debts, that of Armenia must be arbitrarily written off, because no Armenian government exists, but the debt of Russia may have some value since the conclusion of a funding agreement at some future date is not inconceivable. For reasons which are explained in Chapter VIII, it is included at two-thirds its nominal amount.

By these adjustments figures are obtained for more nearly correct values of foreign government obligations to the United States Government arising from war and relief loans. Their aggregate worth at the end of 1926 was $6,511 millions; at the end of 1927, $6,614 millions and at the end of 1928, $6,737 millions.[3] Additions to these successive amounts of $316 millions, $311 millions, and $303 millions must be made for the present worth of payments due from the German

[1] See Table 38 of this volume.

[2] Excepting credits by the United States Grain Corporation which were on the basis of 6%. Accrued interest charges, for funding purposes, however, were recomputed up to December 15, 1922 at 4.25% basis and a 3% basis thereafter. See H. G. Moulton and Leo Pasvolsky, "World War Debt Settlements," 1926, pp. 92–3. See, also, World War Foreign Debt Commission, "Combined Annual Reports," 1922–1926, pp. 322–3.

[3] Discounted upon an annual payment basis. The present worth, as calculated for these successive years, rises slightly each year because of the character of the payment schedules, rising as they do in the later years. They also increase because the allowance for the debt of Russia increases with each year from accrued interest. Adjustments for the taking of options likewise have had a very minor influence.

Government for the settlement of army of occupation costs and American claims.[1]

Against the international assets of the nation must be set the various liabilities. Private investments of foreigners in the United States were estimated by the Department of Commerce at $3.7 billions at the end of 1927, or an increase of $158 millions over 1926.[2] A further increase of $481 millions occurred in 1928.[3] To the sums thus obtained should be added a figure for the liability of the United States Government to citizens of Germany and other Central Powers for property in the keeping of the Alien Property Custodian and also for German claims for the use and disposition during the war of ships, radio stations and patents. These are reckoned at $200 millions for each year.[4]

Bringing together all these aspects of America's international long-term capital assets and liabilities, the comparative balance sheet presented in Table 20 is obtained. Naturally, with such a wide margin of error holding for figures on private investments, prudence must be exercised in interpre-

[1] Computed as in Table 34 of this volume, with adjustments for 1926 and 1927. Figures for American claims against Austria and Hungary determined by the Tripartite Claims Commission are not yet available.

[2] Information from Ray O. Hall, Assistant Chief, Finance and Investment Division, Bureau of Foreign and Domestic Commerce, U. S. Department of Commerce.

[3] *Idem.*

[4] The Alien Property Custodian's Account stood at $179 millions June 30, 1926, $180 millions June 30, 1927, and $181 millions June 30, 1928; United States Treasury, "Annual Report," 1926, p. 366; 1927, p. 144, and 1928, p. 109. The Settlement of War Claims Act of 1928 provides for the payment by the United States Treasury of Mixed Claims Commission awards to private American citizens as soon as possible from a fund known as the German Deposit Fund. To this fund was transferred for immediate application $25 millions of unallocated interest receipts of the Alien Property Custodian's account. It was also provided that 40 millions of this account should be retained for application as required (at 5% interest) to the settlement of these awards. Under the hypothesis that the German Government will eventually agree to release the United States Government from liability for these sums in return for a release from an obligation to pay interest on awards of the Mixed Claims Commission at 5%, beyond the date of their payment by the United States Treasury, a total of $65 millions may be written off. See the United States Treasury, "Annual Report," 1926, pp. 266–9; 1928, pp. 44–51. Another $100 millions, however, should be added to cover the maximum liability of the United States Government to German citizens allowed by Congress, under the Settlement of War Claims Act of 1928 (Public No. 122, 70th Congress) for ships, radio stations and patents used and disposed of under the authority of various wartime acts. Since the final settlements of such claims will not take place for several years, this maximum allowance has a present worth of something less. The figure we have taken of $200 millions for the total liability of the United States is sufficiently close for present purposes.

TABLE 20: THE LONG-TERM CREDITOR-DEBTOR POSITION OF THE UNITED STATES AT THE END OF 1926, 1927 AND 1928

(Compiled by the National Industrial Conference Board)[1]

(In millions of dollars)

Item	1926	1927	1928
Long-Term Capital Assets			
Estimated private American investments in foreign securities and properties	$11,213	$12,185	$13,524
Estimated present value of foreign government debts to the United States at 5%, exclusive of Germany	6,511	6,614	6,737
Estimated present value of Germany's debt to the United States for army of occupation costs and American claims at 5%	316	311	303
Total long-term creditor position of the United States	18,040	19,110	20,564
Long-Term Capital Liabilities			
Estimated private investments of foreigners in the United States	3,542	3,700	4,181
Estimated United States Government debt to former alien citizens by various claims	200	200	200
Total long-term debtor position of the United States	3,742	3,900	4,381
Net long-term creditor position of the United States	$14,298	$15,210	$16,183

[1] For sources, see text.

tation. The procedure is justifiable only because it enables a truer perspective than is possible in any other way.

The Short-Term Creditor-Debtor Position of the United States

At the close of 1926, the Department of Commerce found through a questionnaire that, while Americans had deposits of $327 millions with foreigners, the latter had $1,443 millions or almost five times that amount deposited with Americans.[1] It is also true, however, that Americans had made bank loans and advances to foreigners of about $682 millions against bank loans and advances of foreigners to Americans amounting to $384 millions. While these facts are interesting, they cannot be accepted as final because the most recent survey made covering the situation at the end of 1927 and 1928 was far more complete. They may, however, be included with their limitations in mind, allowing the total 1926 short-term assets and liabilities to remain undetermined.

[1] *Trade Information Bulletin*, No. 503, pp. 45–6.

According to the results of the latest survey of the nation's short-term accounts, foreigners had deposits in the United States at the end of 1927 of $1,938 millions and at the end of 1928 of $1,751 millions. In addition, there were successively in each year foreign funds invested in American bankers' acceptances amounting to $406 millions and $569 millions, in brokers' loans $101 millions and $207 millions,[1] in Treasury Certificates $444 millions and $174 millions and in other short-term loans, $13 millions and $8 millions. Finally, there were loans and overdrafts to Americans amounting to $31 millions at the end of 1927 and $48 millions at the end of 1928. Against these short-term liabilities, there were American deposits abroad aggregating $233 millions and $198 millions respectively, loans and overdrafts to foreigners totalling $568 millions and $601 millions, and, finally, American funds "put out" on foreign money markets amounting to $33 millions and $28 millions respectively.

Other short-term assets and liabilities reported by the Department of Commerce for the close of these two years concerned the position of acceptance credits. Foreigners were liable to American banks for acceptances drawn by them to the amount of $402 millions at the end of 1927 and $519 millions at the end of 1928, of which $313 millions and $316 millions respectively were probably drawn to finance American imports and the remainder to finance goods in transit or storage and dollar exchange.[2] In addition, for-

[1] While foreign funds "put out" on the call-money market did not amount to so impressive a total as had commonly been supposed, figures for another date than the end of the year might have shown larger amounts so placed. If true that rising American call-money rates had not reached a level sufficiently high or permanent greatly to attract foreign funds to the call market, the persistence of high rates probably attracted more funds early in 1929. For example, the *Journal of Commerce and Commercial*, reported foreign funds on call at the beginning of May, 1929 at around $1 billion, of which about $400 millions were assigned to the big Canadian chartered banks, and $300 millions were ascribed to the Bank of France and other French banks. Other important sums were said to have been so placed by British and German banks as well as by large European industrial and commercial corporations. "Foreign Call Loans in This Market Are Placed at a Billion," *Journal of Commerce and Commercial*, May 4, 1929, p. 1. Such an increase in foreign call loans may not have reflected a very great increase in the total short-term liabilities to foreigners, but merely a shift in the employment of funds already here.

[2] According to published surveys of the American Acceptance Council, *Acceptance Bulletin*, Jan. 31, 1929, p. 18, there were $313 millions and $316 millions respectively in 1926 and 1927 to finance imports, leaving an excess successively of $89 millions and $203 millions of acceptances drawn by foreigners unaccounted for. Probably, they were acceptances to finance goods in storage, transit and dollar exchange. The 1926 figure for acceptances drawn by foreigners may be estimated on this assumption at about $324 millions.

eigners were liable for acceptances drawn to finance American exports accepted by American banks to the successive amounts of $288 millions and $362 millions.[1] Offsetting these acceptance credit assets were liabilities to foreigners for acceptances drawn by American banks and individuals, accepted by foreign banks and discounted abroad to the sums of $48 millions at the close of 1927 and $103 millions at the close of 1928, and also liabilities of American importers to foreign banks for acceptance credit extended and executed by the latter amounting to $30 millions and $50 millions. Lastly, American banks held foreign-drawn acceptances for collection to the respective totals of $118 millions and $123 millions, in effect cancelling so much of the amounts due by foreigners for acceptance credit from American banks.

The status of open-book accounts is yet to be considered. There was undoubtedly in each year a large volume of such credit extended by Americans to foreigners, especially in neighboring countries, probably exceeding those extended by foreigners to American importers. How great these open-book credits were can not be determined in any satisfactory way since no survey of them has been made since 1922.[2] On the hypothesis that the same relationship holding that year between open-book accounts and total exports and imports tended to obtain in later years, there may have been at the close of each of the years 1926, 1927 and 1928, respectively about $475 millions, $480 millions and $510 millions owed Americans, against successive amounts of $65 millions, $64 millions and $62 millions owed to foreigners. Because of the lapse of time since 1922, and the changes which have taken place in the financing of

[1] American Acceptance Council figures of acceptances drawn to finance American exports show figures for 1927 and 1928 of $103 millions and $135 millions respectively in excess of those indicated by Department of Commerce survey. These may have represented acceptances drawn by Americans, accepted by foreign banks but discounted in the United States. In such cases an offsetting international liability was created, the American exporter being liable to whomever purchased the bill. About $70 million in 1927 and $79 million in 1928 of additional double liabilities arose from such acceptance financing of goods in transit or foreign storage for American exporters. Such offsetting short-term obligations may properly be eliminated from the balance of short-term accounts, but they suggest with other 1927 and 1928 figures of the Department of Commerce survey and of the American Acceptance Council, about $190 millions in acceptances drawn by Americans to finance exports and accepted by American banks in 1926.

[2] *Trade Information Bulletin*, No. 144, p. 20.

international trade, especially through acceptances in 1927 and 1928, such figures cannot be accepted as accurate. They are suggested only because some modification of the short-term creditor-debtor position of the country indicated by available figures for the dates specified would be necessary if reliable facts were known of the status of international open-book accounts. Omitting them, therefore, but including others previously mentioned, the balance of short-term national accounts, presented in Table 21, is drawn up.

Two observations are suggested by these figures. First is the fact that, while the short-term debtor position of the country is impressive, the net debtor position was only slightly more than half as great for 1927 and less than half for 1928. Moreover, the net volume of open-book credits, if known, would probably have further reduced these net debtor amounts, possibly to as low as around $1,200 millions for 1927 and $900 millions for 1928 if the conjectural estimates made above were roughly correct.

Second, the enormous balances on short-term account of foreigners in the United States reflected the size of America's long-term creditor position, as well as her important international trade position. In other words, a large hang-over of borrowed funds and the maintenance of American deposits by various debtors for interest, dividend, and capital repayment are logical consequences of the volume of foreign investments of Americans, while other deposits were carried by foreigners because of the business they carry on with America. These foreign balances also reflected the operation of the modern gold or gold exchange standard under which foreign central banks have kept American sight balances as legal reserves and other foreign central banks have kept American balances as a matter of policy. Probably a large portion of the short-term funds of foreigners in the United States were of such a character. In any case, their presence here and also the presence of American funds abroad evidenced the close interdependence of international money markets which has prevailed in recent years. The fact that many central banks and innumerable individuals and corporations have been represented among the depositors of

short-term funds in America has provided an element of security similar to that experienced by a bank. Notwithstanding, important shifts in the net creditor position of

Table 21: The Short-Term Creditor-Debtor Position of the United States at the End of 1926, 1927 and 1928

(Source: U. S. Department of Commerce.[1] Arranged by the National Industrial Conference Board)

(In millions of dollars)

Item	1926	1927	1928
Short-Term Capital Assets			
Estimated bank deposits with foreigners	327	233	198
Estimated bank loans to foreigners including overdrafts and American funds "put out" in foreign money markets	762	601	630
Estimated liabilities of foreigners to American banks for acceptances drawn by foreigners to finance American imports, goods in transit or storage and dollar exchange	..	402	519
Estimated liabilities of foreigners for acceptances drawn by Americans to finance American exports and accepted by American banks	..	288	362
Estimated liabilities of foreigners to American exporters and manufacturers on open-book account	..	..	..
Total short-term creditor position of the United States, excluding open-book credit	..	1,524	1,709
Short-Term Capital Liabilities			
Estimated bank deposits of foreigners in the United States	1,443	1,938	1,751
Estimated bank loans of foreigners to Americans, including overdrafts	384	31	48
Estimated foreign funds "put out" in the American money market in acceptances, broker's loans, Treasury certificates, and other short-term paper	419	965	959
Estimated liabilities of Americans for acceptances drawn by Americans and accepted and discounted abroad	..	48	103
Estimated liabilities of American importers for acceptance drawn by foreigners and executed by foreign banks	..	30	50
Estimated liabilities of Americans for foreign drawn acceptances held for collection by American banks[2]	..	118	123
Estimated liabilities of Americans to foreign exporters and manufacturers on open-book account	..	..	..
Total short-term debtor position of the United States, excluding open-book credit	..	3,130	3,034
Net short-term debtor position of the United States as indicated	..	1,606	1,325

[1] Figures on deposits and bank loans for the end of 1926 are from *Trade Information Bulletin*, No. 503, pp. 45–6. For 1926 and 1927, all figures are from a press release of U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce (Finance and Investment Division), May 2, 1929.

[2] An offsetting item against acceptances drawn by foreigners and accepted by American banks.

the country have taken place from year to year as would be expected from the very nature of short-term capital and credit.

The Net Creditor Position of the United States

Combining the final figures obtained in Table 21 with those previously presented in Table 20, it is possible to get an approximate idea from Table 22 of the nation's entire international financial position.

TABLE 22: THE ENTIRE CREDITOR-DEBTOR POSITION OF THE UNITED STATES AT THE END OF 1926, 1927 AND 1928

(Compiled by the National Industrial Conference Board)

(In millions of dollars)

Item	1926	1927	1928
Capital Assets			
Estimated long-term capital assets	$18,040	$19,110	$20,564
Estimated short-term capital assets (excluding open-book credits)	..	1,524	1,709
Total creditor position of the United States	..	20,634	22,273
Capital Liabilities			
Estimated long-term capital liabilities	3,742	3,900	4,381
Estimated short-term capital liabilities (excluding open-book credits)	..	3,130	3,034
Total debtor position of the United States	..	7,030	7,415
Net creditor position of the United States	..	13,604	14,858

Several comments are pertinent in order to place these figures in their proper perspective. Popular references to America's international creditor position in the past have often exaggerated its size. Nevertheless, its amount is striking, being at the end of 1928 from four to six times the net debtor condition at the outbreak of the World War. Gross foreign investments of Americans as a percentage of the estimated money value of the national wealth of the United States in 1928, however, could hardly have amounted to more than 5%, while gross American investments of foreigners as a percentage of the same figure could scarcely have been 1%. The interest and dividend return upon American investments abroad, moreover, was in all probability no

more than 1% of the entire national income and similar outgoing payments to foreigners less than a third of this proportion.

The Geographic Distribution of America's International Assets and Liabilities

The international financial position of the country may be viewed as a whole, as has been done above, or regarded in its relationship to particular geographic areas. In the last analysis, this latter view is just as significant as the former, because international financial problems arise not only because of the entire capital stream moving in and out of the country, but also because of the constituent currents in this stream due to capital movements between the United States and particular countries or areas. Unfortunately adequate information upon them is lacking, but some conception of what must have been their past character may be gained by considering the geographic distribution of America's international assets and liabilities.

Europe looms up at once as America's outstanding long-term debtor. If for no other reason, she would occupy this status because of governmental debts to the United States Government, which amounted to 34% of all long-term capital assets at the end of 1928. When the proportion of private indebtedness of Europe is added, this percentage is raised to 53% of the total, or about $11 billions.[1] Germany is unquestionably the largest European debtor to private American interests. Furthermore, if it is assumed that reparations payments by Germany to ex-Allied Governments, the largest debtors to the United States Government, are to be the source of their debtor payments, she becomes economically, if not contractually, America's largest single debtor country.[2] Although private American investments are numerous in virtually every other European country, they center especially in France, Italy, Belgium, Great Britain and the Scandinavian countries.

[1] According to figures furnished by Finance and Investment Division, Bureau of Foreign and Domestic Commerce, U. S. Department of Commerce.

[2] Chapter VIII should be consulted in this connection.

Next in importance to Europe as a long-term debtor area is Latin America, accounting for about 25% of the total foreign indebtedness, concentrated principally in Cuba, Mexico, Argentina, Chile, Brazil, Peru, and Colombia. Canada comes next with around 17% of the total of America's foreign long-term assets centering there. The remaining percentage covers chiefly investments in the Far East.

America's long-term capital liabilities are mainly represented by investments of Europe, which account for about 79% of the total. Great Britain has been by far the largest purchaser of American investment capital equities, having estimated holdings at the end of 1927 of $1.4 billions or 34% of the entire sum of long-term capital liabilities for that year.[1] Other European countries having sizeable holdings at the same date were the Netherlands, Switzerland and Sweden, collectively amounting to about 16%,[2] and the United States Government was indebted to Germany for around 4.5%. Canada is the only other large long-term investment debtor with American investments of $800 millions at the end of 1928, or approximately 19% of the total.[3]

Of the distribution of short-term capital assets little can be said. Probably, they are divided mainly between Europe and Canada, with Latin America in third place. As for the short-term capital liabilities, Europe easily stands at the top, with France probably the largest creditor, but with Great Britain, the Netherlands, Italy, Sweden and Germany also high up in the list. Representing the Orient, Japan is reported to have large balances here.[4] Canada is undoubtedly the largest short-term creditor on the American Continent,[5] but South American countries probably rank in the order of the importance of their trade and financial relations with the United States.

[1] *Trade Information Bulletin*, No. 552, pp. 8–9. [2] *Idem.*

[3] "Canada, A Capital Exporting Nation," *Wall Street Journal*, January 10, 1929, p. 15.

[4] Information from Ray O. Hall, Assistant Chief, Finance and Investment Division, Bureau of Foreign and Domestic Commerce, U. S. Department of Commerce.

[5] Large reserve balances of Canadian chartered banks, aggregating at the end of 1928 $133 millions, are held in the American market. In addition, the Canadian Government often has large American bank balances, See, "Canada, A Capital Exporting Nation," *op. cit.*, p. 15.

General Conclusions

The general conclusions which have been reached in this and the preceding chapter can be briefly stated. From the standpoint of the country as an economic unit, the United States has not been draining her capital markets through the absorption of foreign security flotations and other foreign investments, but since 1922 has been reinvesting in general the sums receivable on interest, dividend and capital repayment account. Excess investment capital outflows have been more than offset in every year, excepting 1924, after 1922 by inward payments of the latter character or payments indirectly affecting the country's capital supply. Stated in another way, the country, as an entity, has permitted the long-term capital exportations in the war and early post-war years to reside permanently in foreign areas. Any excess of the stream of payments on long-term capital account often has been offset by flows of short-term capital and credits, although in other cases, inward capital payments of the latter type have caused a large net inward stream of all funds on capital account.

In this way, there has been possible a persistent export balance of merchandise, enlarged or diminished by net gold movements, which has been more or less balanced by the excess of service payments over receipts, typical from year to year. In fact, after 1921, the actual balance of all trade, merchandise gold and services was strikingly "unfavorable" in 1922, 1923 and 1926 while it was barely "favorable" in 1924, 1925 and 1927, and substantially "favorable" in 1928.

Thus by the end of 1928 a net long-term creditor position had been built up to over $16 billions. In addition, the net short-term creditor position obtaining at the end of 1919 had been wiped out and even a large net short-term debtor position acquired.

While these inferences explain in a measure how the United States was able to extend her creditor position, they do not imply that the impact of America's international business relations had no fundamental and all-pervasive consequences to the economic and financial structure of the

country. Nor do they take into consideration the fact that there were phases of the broader domestic developments which did exert a profound influence in the maintenance of the enormous volume of capital exports, although they in turn were the result partially or wholly of this international impact. The plain facts of the case are that no simple explanation of the international financial phenomena of the post-war period can be offered. The problem is too complex and has too many angles. The next two chapters, therefore, may be devoted to the nature of the wider international influences upon domestic finance and the reciprocating effects of domestic financial developments upon international finance.

CHAPTER VI

INTERNATIONAL INFLUENCES ON AMERICAN FINANCE

The Problem

IT IS a common belief that the United States has arrived at that stage of industrial development where her aggregate savings are so enormous that it is no longer possible to employ all of them as profitably at home as abroad. It is a prevalent opinion, too, that as a result of this new industrial status the United States has become a full-fledged creditor nation, exporting steadily larger and larger quantities of new capital. The facts assembled in the preceding chapters should greatly modify this popular notion. They have shown that, although larger and larger exports of investment capital have occurred in recent years, they have often been partially offset by investment capital imports and, with other inward capital payments, have even been exceeded. They have not shown, however, that America has reached a stage in her development where rapidly increasing capital exports are to be normally expected.

Circumstances more or less accidental and wholly unprecedented contributed to the achievement of America's enormous international creditor position by the end of 1919. As was pointed out in Chapter III, one of the most fundamental of these circumstances was an enormous expansion of bank credit or money purchasing power resulting from the interaction of both domestic and international influences; e. g., the inflow of gold before 1917; the introduction of the Federal Reserve System with reduced reserve requirements for national banks and indirectly for the whole banking system; and, finally, the war-time financing of the Federal Government which stimulated a larger utilization of available credit resources.

To what extent were similarly unusual factors important in leading to the extension of the country's international creditor position in recent years? Or to what degree was

this due to a real accumulation of surplus capital funds from national savings because of an advanced industrial development? These are the problems with which the present and the following chapter will deal.

To illuminate them, it is necessary first to take into account the character of the international gold movements, which were observed in the last chapter to have a much greater financial importance than their weight in the nation's balance of international payments would indicate. Gold is the fulcrum of the entire credit system, and a comparatively small amount of it, as is well known, may become the basis of a large volume of credit purchasing power. Any addition to or subtraction from the nation's gold resources, consequently, is of the utmost influence upon existing financial conditions. Consideration of the reaction of the credit system to these gold movements will constitute, therefore, the second step in this analysis. The last part of the chapter, finally, will discuss the broader ramifications of the changing credit conditions upon domestic and international trade and financial relations.

A brief description of the peculiarities of the American banking organization is a requisite for the following treatment. In general, it consists of about eight thousand national banks, nineteen thousand state banks of all sorts and a number of private banks, all of them operating more or less independently. A degree of centralized organization is attained by the Federal Reserve System, to which all national banks necessarily belong and more than a thousand state banks voluntarily. Over 60% of all bank deposits of the country are held in these member banks. Twelve Federal Reserve banks, coordinated by the Federal Reserve Board, head up the system and act as central banks. Within their vaults are held gold reserves, not only of all member banks directly but indirectly of practically all non-member banks, because the larger share of the latter's reserves are in the form of deposits with member banks.[1] The reserve deposits with Federal Reserve banks, however, are not necessarily held in gold, since only 35% is required to support them

[1] See the summary of state laws regarding reserves of state banks, *Federal Reserve Bulletin*, Vol. 14, Nov., 1928, pp. 778–805.

by the Federal Reserve Act. Moreover, Federal Reserve banks may issue upon gold held in excess of the required ratio, Federal Reserve notes with either 100% gold in reserve or at least 40% in gold and 100% in discounted commercial paper. These notes may be used, together with other forms of United States currency, as till money by all banks and as cash reserves of some non-member state banks.

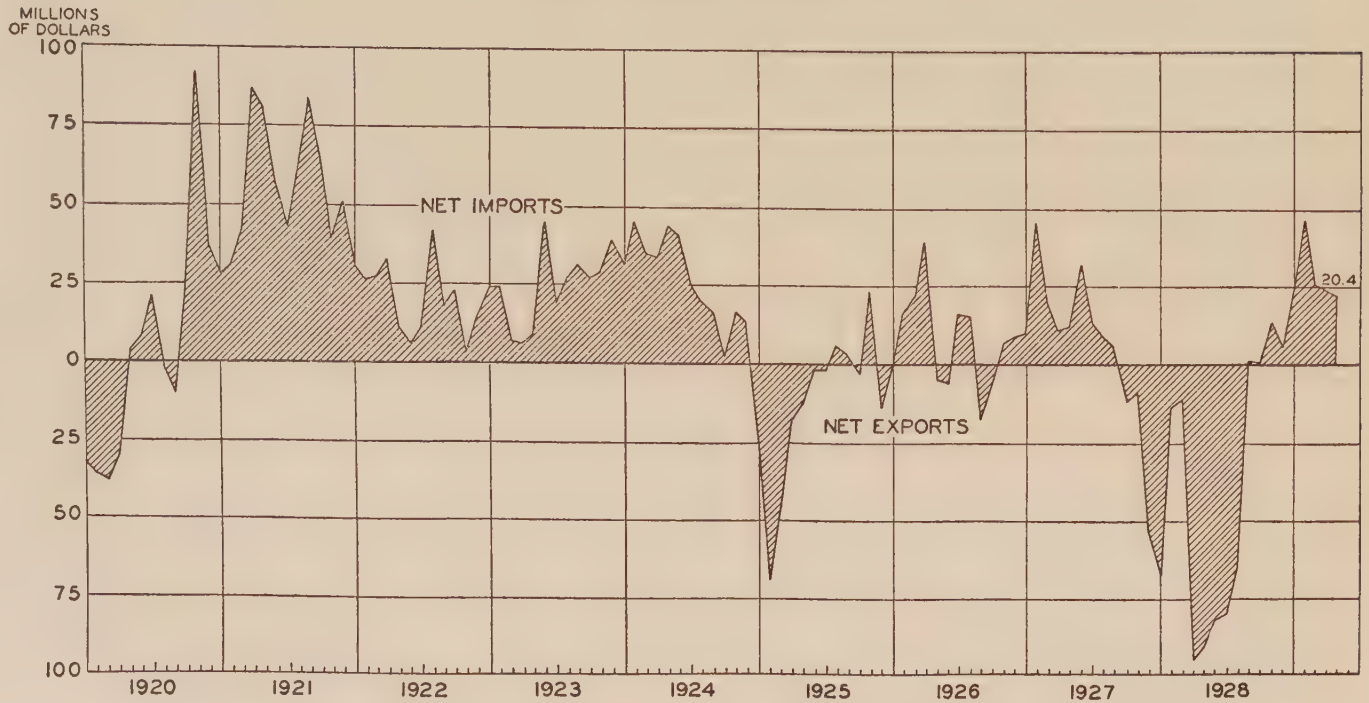
The significant fact to be noted in this short description is that the effective credit base of the banking system at large is not only gold, but gold plus Federal Reserve credit. Since Federal Reserve banks, like all central banks, may promote or restrain the use of their credit as a base for ordinary bank credit, special note must be taken of this fundamental factor. Accordingly, in the succeeding chapter attention will be turned to an examination of the policies which were pursued by the Federal Reserve banks respecting the use of their credit; the extent to which they were affected by international as against domestic considerations; and the convergence of both considerations. Chapter VII should be read, therefore, in the light of the discussion presented in this chapter because of the intimate connection existing between the two.

International Gold Movements

A more complete view of the gold movements in and out of the United States than was possible in discussing their relation to the annual balance of international payments is shown on Chart 5, while the details of the major sources and destinations of gold flows appear in Table 23. Immediately after the termination of America's war-time embargo on gold exports, a net outward movement of gold occurred to countries which had accumulated balances in the United States during the embargo period. The outflow continued until September, 1920, and aggregated $384 millions. After that month and until December, 1924, imports exceeded exports to the amount of $1.7 billions. A considerable net outflow developed in December, 1924, and the first six months of 1925, aggregating $180 millions, followed by a period of alternating net exports and imports until August, 1927, the

Chart 5: Net Imports and Net Exports of Gold for the United States, 1920–1928

(Source: Federal Reserve Board)[1]



[1] "Annual Report," 1927, pp. 79-80, and *Federal Reserve Bulletin*, Vol. 15, May, 1929, p. 317.

balance of which ($260 millions) was on the import side. A substantial gold exodus, totaling $576 millions, occurred in the last part of 1927 and the first seven months of 1928, with a slightly inward movement thereafter. The chief

TABLE 23: THE ANNUAL NET GOLD MOVEMENT OF THE UNITED STATES BY PRINCIPAL COUNTRIES AND AREAS, 1920–1928

(Source: Federal Reserve Board)[1]

(Calendar years, thousands of dollars, imports + and exports −)

Year	France	Germany	Netherlands	Sweden	United Kingdom	Other European Countries
1920	+48,739	−2	+2,099	+2,036	+274,784	+12,590
1921	+190,688	+19,928	+19,893	+63,713	+202,091	+186,365
1922	+27,043	+35	+9,958	+32,886	+121,863	+30,558
1923	+16,377	+49,552	+13,202	+5	+149,534	+2,295
1924	+24,346	−15,171	+49,641	+4,522	+118,645	+2,395
1925	+5,267	−68,269	+5,767	−1,003	+43,135	−1,402
1926	+333	−47,549	..	+1	+1,212	+108
1927	+11,048	−13,993	+10,075	−995	+30,834	−7,201
1928						
First seven months	−307,877	−27,610	−4,000	..	−32,513	−26,060
Last five months	+25	−357	..	..	+37,512	−2,031

	North and Central America	South America	China	British India	Japan	Other Countries	All Countries
1920	+20,365	−183,823	−28,286	−6,573	−101,299	−99,034	+106,653
1921	+45,810	+24,203	+17,913	+32,010	+2,208	+84,001	+668,249
1922	−4,045	+10,182	+8,587	−4,445	..	+5,217	+238,295
1923	+52,536	+12,748	+5,478	−14,638	+6	+6,878	+294,072
1924	+42,315	+27,227	+5,021	−11,025	..	+9,847	+258,073
1925	−15,029	−9,355	−1,083	+58,775	+11,008	+45,971	−134,367
1926	+55,784	+22,923	+4,578	−578	+14,000	−4,478	+97,796
1927	+34,229	−86,802	+1,796	−2,974	+20,000	+14,219	+6,080
1928							
First seven months	+74,306	−106,699	−7,149	−1,448	−125	+2,771	−436,403
Last five months	+5,052	+5,184	−2,225	−35	−119	+1,819	+45,532

[1] Federal Reserve Board, "Annual Reports," 1920–1927, and *Federal Reserve Bulletin*, Vol. 14, Sept., 1928, p. 649, and Vol. 15, Feb., 1929, p. 108.

reasons for these enormous gold movements may be briefly reviewed.

Gold Movements before 1925

Prior to 1925, gold came to the United States from all areas, but principally from Europe. Part of it, especially

the receipts of 1920 and 1921, came for the purpose of meeting indebtedness due from European borrowings made before America's entry into the war and to liquidate commercial credits extended in early post-war years.[1] In addition, Europeans shipped gold to America to purchase current supplies of food, and raw materials for reconstruction purposes.[2] Still another reason was the shipment of gold to obtain dollar credits for exchange market control,[3] a factor of particular importance when efforts to stabilize currencies became more prominent.

The source of the gold imported into the United States before 1925 is interesting because the reserves of only a few foreign central banks and governments sustained a decrease, while those of others actually underwent a slight increase, as can be observed in Table 24. A part of it probably came from accumulation obtained by withdrawals from circulation and from decorative and commercial uses during the war period and not included in reported gold reserves of central banks. A second source was the reserves lost by Germany and the almost complete redistribution of those of Austria-Hungary and Russia in the immediate post-war years, subsequently diffused over the world.[4] Some gold arrived directly from Germany and Russia to pay for food supplied by the United States Grain Corporation.[5] In the third place, gold came from current production, especially the mines in the British Empire, because of the maintenance of the full gold standard and consequently a free gold market.[6] Finally, some countries found it convenient to dispose of part of their gold holdings, preferring in their place foreign assets, and this gold naturally tended to flow or

[1] "The Gold Situation," *Federal Reserve Bulletin*, Vol. 7, June, 1921, p. 679. The repayment of the Anglo-French loan of $500 millions of 1915 in 1920 is said to mark the beginning of the gold inflow.

[2] *Ibid.*, Vol. 9, April, 1923, pp. 433–4.

[3] "Reduced Currency Demand and Gold Imports," *Federal Reserve Bulletin*, Vol. 10, Sept., 1924, p. 683, and "Gold Movements and Swedish and Dutch Exchange," Vol. II, April, 1925, p. 232. Imports from the Netherlands, Sweden and Switzerland in 1924 especially were for this purpose.

[4] "The Gold and Silver Situation," *op. cit.*, Vol. 8, 1922, p. 659, and "The Gold Situation," *op. cit.*, Vol. 10, April, 1924, p. 269.

[5] "The Gold and Silver Situation," *op. cit.*, Vol. 8, 1922, p. 659, and "The Gold Situation," Vol. 9, April, 1923, p. 433.

[6] See especially, "The Gold Situation," *op. cit.*., Vol. 9, June, 1921, p. 681.

was actually sent to the United States as the temporary gold center of the world.[1] Gold movements from principal countries were subject to embargo control, official or *de*

TABLE 24: GOLD HOLDINGS OF PRINCIPAL CENTRAL BANKS AND GOVERNMENTS, 1913 AND 1920–1928

(Source: Federal Reserve Board)[1]

(In millions of dollars; end of year figures)

Country	1913	1920	1921	1922	1923	1924	1925	1926	1927	1928
United States[2]	1,290	2,434	3,221	3,506	3,834	4,090	3,985	4,083	3,977	3,746
Great Britain[3]	170	763	764	752	754	757	703	735	742	750
France[3]	679	690	690	708	709	710	711	711	954	1,253
Germany[3]	279	260	237	227	111	181	288	436	444	650
Italy[3]	265	204	211	217	216	218	219	221	239	267
Austria and Hungary[4]	251	..	..	..	1	9	12	37	46	59
Netherlands[3]	61	256	244	234	234	203	178	166	161	175
Spain[3]	92	474	485	487	488	489	490	493	502	494
Sweden[3]	27	75	74	73	73	63	62	60	62	63
Switzerland[3]	33	105	106	103	109	98	90	91	100	103
Russia[3]	787	..	..	3	45	73	94	85	97	92
Canada[5]	117	113	95	147	127	151	157	158	152	114
Argentina[6]	256	474	472	472	466	443	451	451	529	607
Brazil[7]	53	19	25	27	49	54	54	56	101	149
Chile[3]	..	33	34	34	34	34	34	10	7	7
Uruguay[3]	11	57	59	57	57	57	57	57	57	68
Australia[8]	22	115	113	116	121	121	128	107	105	108
New Zealand[8]	25	37	37	38	38	38	38	38	38	35
India[9]	124	116	118	118	109	109	109	109	119	124
Japan[10]	65	552	611	606	600	586	576	562	542	541
Java[3]	10	88	59	61	63	54	73	79	72	68
South Africa[3]	40	51	58	51	52	52	44	37	40	39
Other countries	174	225	241	277	293	326	338	381	428	469
Total	4,831	7,141	7,954	8,314	8,583	8,916	8,891	9,163	9,514	9,981

[1] *Federal Reserve Bulletin*, Vol. 15, April, 1929, p. 263.
[2] United States Treasury and Federal Reserve Banks.
[3] Central bank only.
[4] Central bank of Austria-Hungary for 1913, central banks of Austria and Hungary combined, 1923–1928.
[5] Government only.
[6] Government conversion fund and Bank of the Nation.
[7] Before 1924, guarantee of currency fund; 1924 and after Bank of Brazil and government stabilization fund.
[8] Six banks of issue.
[9] Currency and gold standard reserves.
[10] Government and central bank.

facto, and most shipments were made either with the permission or at the direction of foreign governments or central banks.

[1] "Reduced Currency Demands and Gold Imports," *op. cit.*, p. 683, and "Gold Movements and Swedish and Dutch Exchange," *op. cit.*, p. 232.

Gold Movements after 1924

All of the extraordinary influences which tended to govern the movement of gold and its concentration in the United States before 1925 did not continue to operate in subsequent years, owing to the rather wide-spread reestablishment of the gold standard in 1925 under the leadership of Great Britain, and the heavy capital lending of Americans to foreigners. Consequently, new gold production at least tended to be diverted from American markets into the gold reserves of other countries, and the general inward movement was greatly slowed down. Exports from the United States, moreover, became of greater importance as countries returning to a gold standard sought to supplement their existing gold reserves from America's holdings. While the principal movements, both export and import, were directed by foreign governments or central banks in accordance with credit policies and stabilization programs, gold flows occurred more and more as the result of private banking operations, although as a whole, the movements never ceased to be wholly free from control.

Viewing the major movement more closely, the gold outflow from December, 1924 to June, 1925 was due chiefly to the large exportations to Germany to facilitate the execution of the Dawes Plan for the restoration of German monetary stability.[1] In 1926, imports, mainly from Australia, Chile, Mexico, and Japan, and exports again to Germany, were directly in response to credit programs of foreign governments and central banks, with seasonal movements at the hands of private bankers accompanying exchange rate fluctuations in the case of Canada.[2] Similarly in 1927, credit programs and policies of foreign governments and central banks explain the major inflow during the first eight months from France, Chile, Australia and Japan, although large imports came in response to exchange market conditions from England and The Netherlands as well as from Canada. Gold movements, as a result of exchange fluctuations, were still more numerous in the large exodus in 1927 and 1928, but even then, deliberate withdrawals, especially by Argentine,

[1] Federal Reserve Board, "Annual Report," 1927, p. 14.

[2] *Idem.*

Brazil, Belgium, France, Italy, The Netherlands, and Poland undoubtedly constituted the greater part of the movement.[1] Only since late 1928 can gold movements be said to have taken place predominantly as the result of private banking operations and to have acquired again a semblance of their pre-war character.

Summary

Unusual and unparalleled circumstances tended to govern the international movement of gold in the entire post-war period, but it was mainly in consequence of America's international creditor and trade position that gold first began and continued to concentrate in American vaults. It was also the consequence of the maintenance of a full gold monetary standard in a period when foreign currencies were almost wholly disorganized and foreign ability to retain gold reserves at a minimum. When monetary stabilization became more general, gold concentration in the United States gradually came to an end and some gold was even exported, involving at the end of 1927 and the first seven months of 1928 a gold exodus for a time comparable in volume to the previous influx. This large exodus, however, was of relatively short duration, and for the entire period from 1920 to 1928 gold imports exceeded exports by over $1.1 billion.

Since gold is the tangible basis for bank loans and currency issues, the enormous inflow of gold until 1927 and the outflow in 1927 and 1928 must have had far-reaching effects upon the domestic financial structure. These effects, moreover, necessarily had some bearing upon the international financial developments of the period. The remainder of the present chapter is devoted to this specific problem. What effects did the early gold inflow have upon the credit base of the country, constituted as it is of both gold and Federal Reserve credit? To what extent did an expansion of commercial credit take place? For what purposes was the new credit employed? In short, in what measure did extraordinary financial developments stimulate American post-war creditor expansion?

[1] *Idem.*

Gold and the Credit Structure

Gold imports into the United States, in the usual course of events, first find their way into the vaults of Federal Reserve member banks.[1] So long as the gold remains there it does not count as part of the legal reserves. Hence, a bank receiving gold tends to deposit it as soon as possible with a Federal Reserve bank. If the receiving member bank has paper under rediscount at the moment, the gold may be used to reduce the amount. On the other hand, if it has no rediscounts, the gold is added to its reserve balance and to that extent increases its lending power.[2]

The member bank cannot extend immediately more than an equivalent amount of new loans upon such gold deposits, because part of this reserve balance will be transferred to other banks through check clearing operations. But not all of it will be so withdrawn, and additional lending may take place upon it, the particular commercial bank being limited only by its required reserve ratio.[3] Other banks receiving a claim upon the first bank's balance will in turn have increased reserve balances and a corresponding increase in lending power. Time is required for the complete working out of the process; the potential credit expansion of the gold added to reserve balances may not be reached for some period. Nevertheless, the maximum of immediate or direct expansion will take place eventually, since individual banks are business concerns organized for profit and, hence, seldom carry surplus reserves.

However inevitable this direct credit expansion may appear, it may seem that the Federal Reserve banks could take steps to restrain it. Whether or not they can accomplish this depends necessarily upon the amount of Reserve credit already extended to the business community. If member banks are in debt to Reserve banks at the same time,

[1] See the discussion in the Federal Reserve Board, "Annual Report," 1923, pp. 16–20.

[2] A member bank might discount its paper with a Reserve bank in anticipation of gold receipts.

[3] J. S. Lawrence, "Stabilization of Prices," New York, 1928, Chapter XXIII, "Central Bank Rates; Borrowed Reserve and Bank Expansion." See also B. M. Anderson, "Bank Expansion versus Savings," *Chase Economic Bulletin*, Vol. VIII, June 25, 1928, pp. 3–6.

higher rediscount rates may be initiated to encourage them to repay their Reserve bank indebtedness, thus preventing an expansion of reserve balances. Again if Reserve banks possess large holdings of securities, these may be sold in order to offset the new gold. There may be limits to either of these possibilities, however, as the discussion in the following chapter will suggest.

The Effects of the Post-War Influx of Gold

A graphic picture of the fundamental changes in the American credit structure in the post-war period is presented in Chart 6, showing the movement of the country's monetary gold stock, money in circulation, Reserve bank credit, member bank reserve balances, and the total credit base of the country, Reserve bank credit plus gold stock. The pertinent features are noted in the following discussion, but attention should first be directed to the effect of the international gold movements upon the monetary gold stock.

From the end of August, 1920 to the end of November, 1924, the monetary gold stock grew from $2,850 millions to $4,517 millions, largely as a result of the gold influx, a net increase of $1,667 millions.[1] The initial post-war gold inflow, dating from September, 1920, came at a time of widespread credit liquidation, following the crisis earlier in the year. It practically coincided with the zenith of Federal Reserve credit expansion, reached in October of the same year. The ensuing inflow accompanied a period of commercial bank loan and Federal Reserve credit contraction which lasted through 1921. That the gold influx was a substantial factor in facilitating the reduction of borrowings at the Federal Reserve banks may be seen by observing the curves for Reserve bank credit and monetary gold stock. As nearly as can be estimated, according to Federal Reserve authorities, about one-half of the total contraction in the borrowings of member banks during 1921 and 1922 was effected by the use of imported gold.[2] Hence, member bank reserve balances reacted but slightly.

The effect of the gold received after the middle of 1922 had

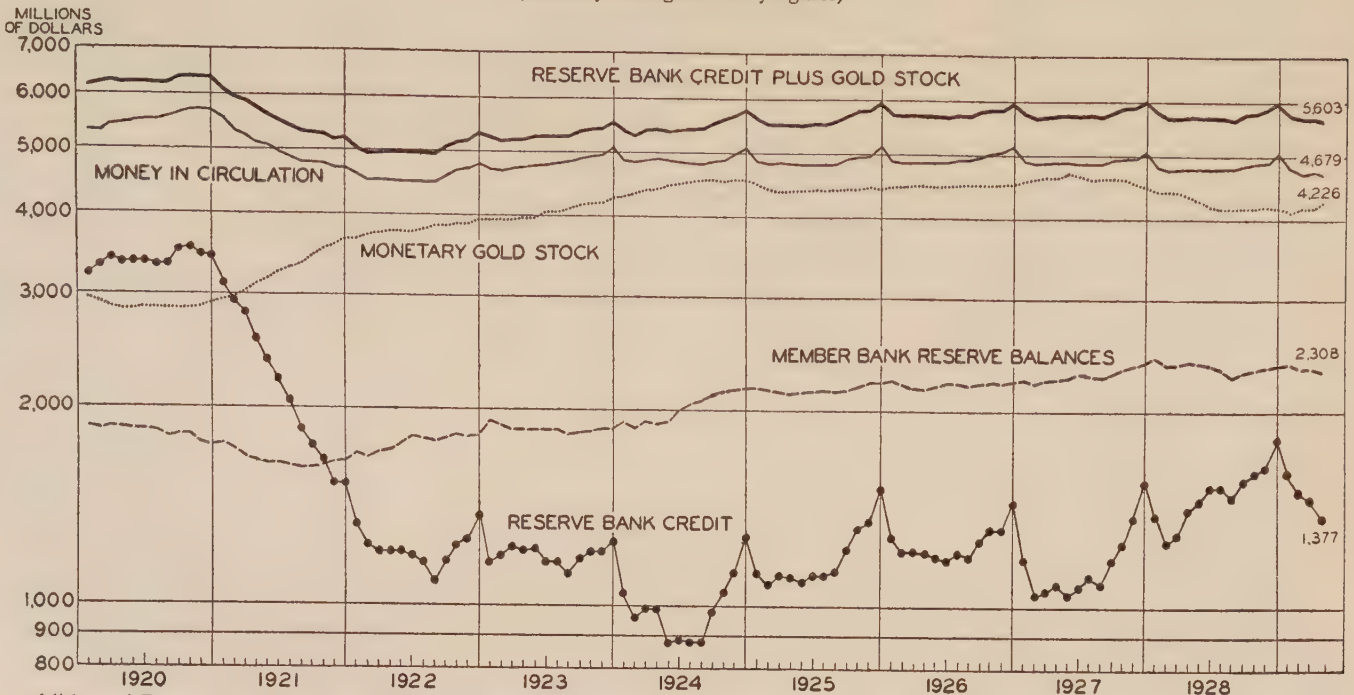
[1] Partly, however, as a result of domestic production.

[2] Federal Reserve Board, "Annual Report," 1923, p. 18.

Chart 6: The Movement of Member Bank Reserve Balances Compared with Movements of Monetary Gold Stock, Money in Circulation and Reserve Bank Credit, 1920–1928

(Source: Federal Reserve Board)[1]

(Monthly averages of daily figures)

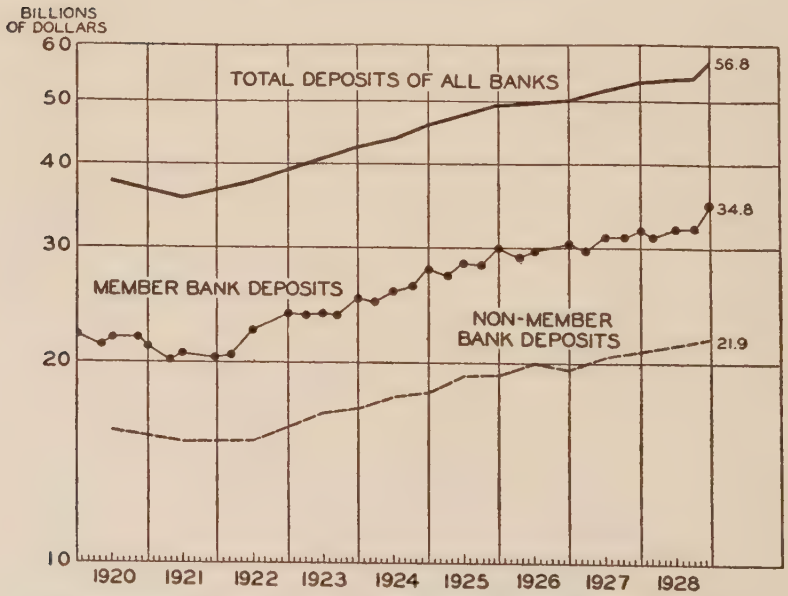


[1] "Annual Report," 1927, pp. 54–55, 57–58, 77 and 81, and the *Federal Reserve Bulletin*, Vol. 15, Jan., 1929, p. 11, and May, 1929, p. 317.

different consequences from those of the gold received previously. Credit liquidation had ceased and a process of business recovery had gotten under way. Under these conditions, fewer member banks liquidated their borrowings at the Reserve banks with new gold but deposited it to their reserve accounts, using it to expand their loans and to sup-

CHART 7: THE GROWTH OF BANK DEPOSITS IN THE UNITED STATES, EXCLUSIVE OF INTERBANK DEPOSITS, FOR ALL BANKS, MEMBER BANKS AND NON-MEMBER BANKS, 1920–1928

(Source: Federal Reserve Board)[1]



[1] "Annual Report," 1927, pp. 105–7; and *Federal Reserve Bulletin*, Vol. 14, Dec., 1928, p. 887; Vol. 15, Jan., 1929, p. 55, and April, 1929, p. 306.

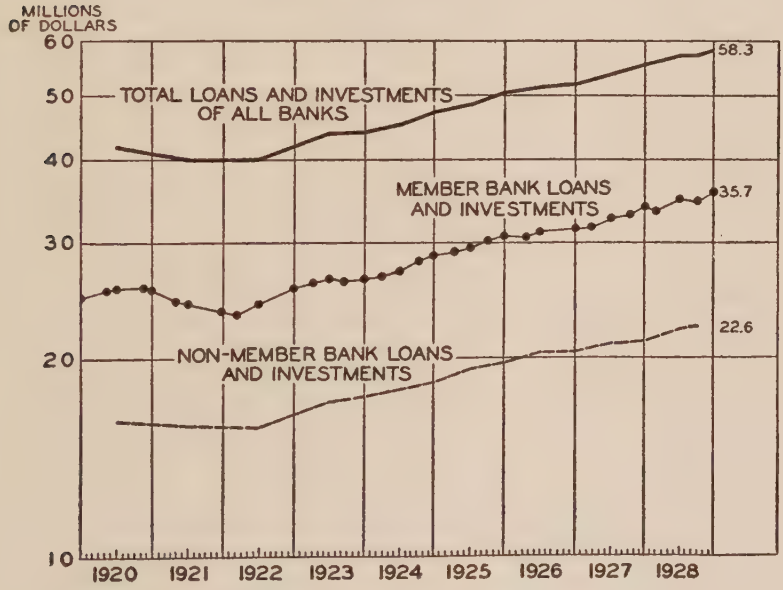
ply the currency requirements of their customers, which the curve of money in circulation shows have increased until 1924.[1] Consequently, member banks were generally able to maintain a growth of their reserve balances independently of Reserve bank support. The fact that Reserve credit ceased to contract save for 1924, however, was an important factor in this ability.

[1] *Ibid.*, p. 19, and 1924, pp. 7–8.

The gold outflow in 1925 affected the monetary gold stock of the country but slightly and only temporarily retarded the growth of member bank reserve balances, which increased with the expansion of Federal Reserve credit. The fact that gold movements were generally inward after that time contributed further to the increase of member bank

CHART 8: THE GROWTH OF BANK LOANS AND INVESTMENTS IN THE UNITED STATES FOR ALL BANKS, MEMBER BANKS AND NON-MEMBER BANKS, 1920–1928

(Source: Federal Reserve Board)[1]



[1] See sources to Chart 7.

balances. When the gold efflux developed in 1927 and 1928, leading to a decline of $475 millions in the monetary gold stock from the end of August to the end of July, 1928, increased employment of Federal Reserve credit enabled the continued growth of reserve balances until the beginning of 1928 and prevented more than a slight recession and even aided some recovery later in the year. A contraction of money in circulation, however, was also a factor in this situation.[1]

[1] Federal Reserve Board, "Annual Report," 1928, pp. 17–8.

The Expansion of Commercial Bank Credit

The reaction of commercial bank credit to the expansion of the reserve balances of member banks of the Federal Reserve System accompanying the growth of the country's credit base is indicated on Chart 7, which shows the growth of all bank deposits of the United States, all member bank

TABLE 25: TOTAL DEPOSITS, EXCLUSIVE OF INTERBANK DEPOSITS, AND TOTAL LOANS AND INVESTMENTS OF ALL BANKS IN THE UNITED STATES, 1920–1928

(Source: Federal Reserve Board)[1]
(In millions of dollars)

Year	Total Deposits			Total Loans and Investments		
	All Banks	Federal Reserve Member Banks	Non-Member Banks	All Banks	Federal Reserve Member Banks	Non-Member Banks
1919—June 30	33.6	19.1	14.4	36.6	22.2	14.3
1920—June 30	37.7	21.9	15.8	41.7	25.6	16.1
1921—June 30	35.7	20.6	15.1	40.0	24.1	15.9
1922—June 30	37.6	22.4	15.2	40.0	24.2	15.8
1923—June 30	40.7	23.8	16.8	43.7	26.5	17.2
Dec. 31	42.1	25.0	17.2	44.0	26.5	17.5
1924—June 30	43.4	25.7	17.7	45.2	27.2	18.0
Dec. 31	45.8	27.8	18.0	47.2	28.7	18.4
1925—June 30	47.6	28.4	19.2	48.8	29.5	19.3
Dec. 31	49.2	30.0	19.2	50.6	30.9	19.7
1926—June 30	49.7	29.7	20.0	51.6	31.2	20.4
Dec. 31	50.0	30.5	19.6	52.0	31.6	20.4
1927—June 30	51.6	31.2	20.4	53.8	32.8	21.0
Dec. 31	52.9	32.0	20.8	55.5	34.2	21.2
1928—June 30	53.4	32.1	21.3	57.2	35.1	22.2
Dec. 31	56.8	34.8	21.9	58.3	35.7	22.6
Percentage increase, June 30, 1928 over June 30, 1922	42.0%	43.3%	40.1%	43.0%	45.0%	40.5%
Percentage increase, Dec. 31, 1928 over June 30, 1922	51.1%	55.4%	44.1%	45.7%	47.5%	43.0%
Average annual increase, June 30, 1922 to June 30, 1928	7.0%	7.2%	6.7%	7.2%	7.5%	6.8%

[1] "Annual Report," 1927, p. 105, and *Federal Reserve Bulletin*, Vol. 14, October, 1928, p. 730, and Vol. 15, April, 1929, p. 306.

deposits and all non-member bank deposits. Chart 8 gives the growth of all bank loans and investments and similarly those of member banks and non-member banks. Table 25 contains a summary of the figures from which these charts have been prepared and the percentage increases of the 1928 figures over those for 1922, the year from which commercial credit expansion dates.

The facts are revealing. Total bank loans and investments increased 43% from June 30, 1922 to June 30, 1928, or at an average rate of 7.2% per annum, and total bank deposits at a rate only slightly less. Although the average annual credit growth was somewhat more rapid for Federal Reserve member banks, it was only a small percentage over that for non-member banks, indicating that the influence of the expanding credit base permeated the entire banking structure. In other words, increased bank reserves were widely diffused over the country, and the credit system as a whole was expanded.[1]

The increased bank reserves, however, were not the sole factor in the expansion of the total volume of credit. A fundamental shift occurred in the very constitution of bank deposits of member banks which facilitated the growth of bank credit. That is to say, a principal cause of the expansion of all bank credit has been the more rapid increase of time deposits of member banks than demand deposits, since only 3% in reserve balances is required against the former. This development is shown on Chart 9, which gives curves for time deposits and net demand deposits of reporting member banks in leading cities, possessing about two-thirds of member bank deposits and around two-fifths of all bank deposits. Net demand deposits expanded markedly in only one year, 1924, although there were important gains in 1922 and 1927. Time deposits, on the other hand, increased steadily during the entire post-war period until the latter part of 1928.[2]

This growth, the Federal Reserve Board observed, "has

[1] This conclusion, however, must be qualified. The growth of total bank loans and investments and total deposits was greatest in the New York Federal Reserve District, and in other districts containing large metropolitan areas. Moreover, the increase as between member and non-member banks differed in various districts. See the statistics of the Federal Reserve Board, "Annual Report," 1927, pp. 177–80.

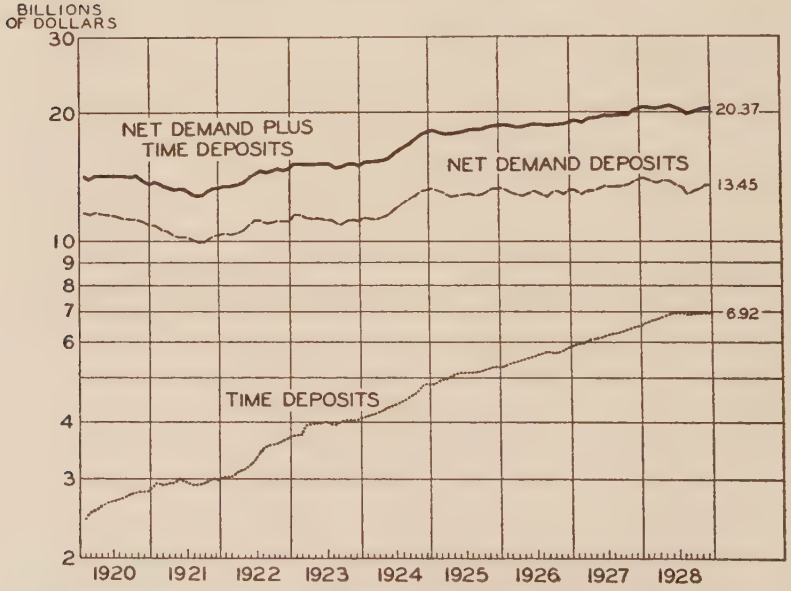
[2] While these time deposits are mainly savings and thrift deposits—about three-fourths, judging from figures on savings and time deposits in the summary report of the condition of all national banks published by the Comptroller of Currency in his "Annual Reports"—the remainder are idle funds of corporations, municipal and state governments, foreign banks and large investors left temporarily while otherwise unemployed. The withdrawal of these latter funds for use in the call-loan market and security speculation probably accounts for the flattening out of the time-deposit curve in the last six months of 1928. The main increase in all time deposits has probably been in savings and thrift deposits owing to a shift in their direction from savings banks and state commercial bank and trust companies to national banks.

been an important factor in the last six years in enabling member banks to increase their loans and investments by $11 billions on the basis of $756 millions added to their reserve balances," or in a ratio of 15 to 1.[1] Its effects were not confined to member bank credit expansion, but were

CHART 9: THE GROWTH OF NET DEMAND DEPOSITS AND TIME DEPOSITS OF ALL REPORTING MEMBER BANKS IN LEADING CITIES, 1920–1928

(Source: Federal Reserve Board)[1]

(Monthly averages of weekly figures)



[1] "Annual Report," 1927, p. 113, and *Federal Reserve Bulletin*, Vol. 15, Jan., 1929, p. 15.

spread over the entire banking system, aiding non-member banks as well to expand their loans and investments.

Finally, it should be observed that this credit expansion has been accompanied by an increase in payments by means of checks. For example, average monthly check payments in the country's central security market, New York City, after a slight recession from the war period, increased from

[1] Federal Reserve Board, "Annual Report," 1927, p. 7.

$19.9 billions in 1923 to $41.7 billions in 1928, while for other large centers, they rose from $19 billions to $25.5 billions.[1] Stated more precisely, the increase in check payments kept pace with the growth of demand deposits until 1925, but thereafter until the end of 1928 the former grew more rapidly. Relative to a 1920–25 average, consequently, the rate of turnover of demand deposits increased 70% by 1928 for New York City alone and 15% for other cities.[2] Thus, not only was a rapid increase in bank credit taking place, but a consistently and even increasingly rapid turnover or effective use of this credit in the larger cities was operating concurrently after 1923, further to accentuate and magnify the ordinary effect of increased credit funds.

The Channels of Credit Expansion

The question as to how this greatly augmented volume of credit was employed is extremely pertinent to the issues raised by this study. Although commercial and industrial needs for bank credit have been greater in absolute terms than in previous periods, they have been relatively less owing to smaller inventories, "hand-to-mouth" purchasing and greater emphasis upon rapid turnover of commodities. Furthermore, there has been a conspicuous tendency, particularly in more recent years, for corporations to finance their working capital requirements through bond or stock issues, thus freeing themselves of dependence upon banks for commercial loans. Against these conditions, of course, must be set the growing extension of bank credit to finance instalment purchases and to facilitate the activities of the building and related industries.

Commodity Requirements for Credit

As good an indication of the trend of commercial requirements for credit as exists is to be found in the curve for *all*

[1] Debits to individual accounts in 150 of the larger clearing house centers collected by the Federal Reserve Board, U. S. Department of Commerce, Bureau of Census, *Survey of Current Business*, February, 1919, p. 125.

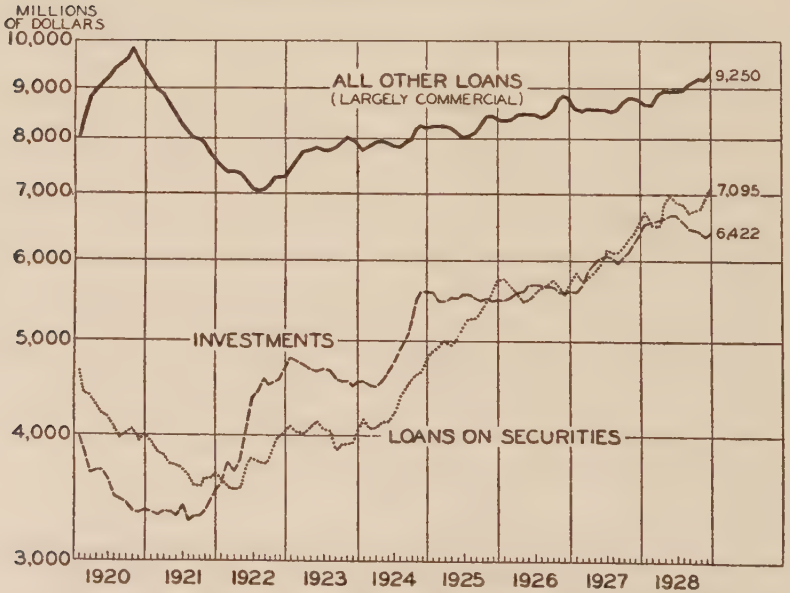
[2] Based on the average monthly indexes of velocity of bank deposits published in the *Monthly Review* of the New York Federal Reserve Bank, expressed as relatives to "normal" or the average turnover of bank deposits from 1920 to 1925.

other loans (largely commercial) of the reporting Federal Reserve member banks in leading cities, which appears on Chart 10. One reservation must be kept in mind in noting this index, however. Loans on real estate mortgages and liens are included here. Such loans were approximately 8% of the total of all other loans of all member banks in 1920

CHART 10: THE GROWTH OF LOANS AND INVESTMENTS OF ALL REPORTING MEMBER BANKS IN LEADING CITIES, 1920–1928

(Source: Federal Reserve Board)[1]

(Monthly averages of weekly figures)



[1] "Annual Report," 1927, p. 112, *Federal Reserve Bulletin*, Vol. 15, Jan., 1929, p. 15.

and in 1922, 1924, 1926 and 1927 about 14%, 16%, 18% and 20%, respectively. In other words, real estate loans have been an increasing proportion of the "other" credit extended by member banks in the eight years from 1920 to 1927[1] in-

[1] These percentages have been figured on data as of June 30 of each year. The original figures from 1925 to 1927 may be found in the Federal Reserve Board, "Annual Report," 1927, p. 110, and for preceding years in the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, "Statistical Abstract of the United States," 1924, p. 239. For the years 1920, 1922 and 1924 inclusive, it has been necessary to estimate the "all other loans" of all member banks.

clusive, and have in all probability been a growing proportion of the "other" credit extended by non-member banks. This curve, therefore, depicts the commodity demands for credit in leading cities in an exaggerated fashion.

The very fact of its exaggeration is of great significance. A considerable part of the growth exhibited by this curve from the low point reached in July, 1922, until the present time has been for real estate purposes, facilitating no doubt the increased building activity and the high level of urban realty values which has been maintained since 1923, according to the index of the New York Federal Reserve Bank.[1] Allowing for this, and granting that the remainder of the growth has taken place for the purpose of financing commodity production and trade, and in the process a considerable development of instalment purchasing, it seems clear that bank credit expansion did not go directly into the channels of commodity production and trade through commercial loans. Such loans have not even approached the peak reached in 1920.

Employment of the Enlarged Supply of Bank Credit

Other channels constitute the major directions of the flow of new bank credit. On Chart 10 may be found curves for *investments* and *loans on securities* for reporting member banks in leading cities. Bank security investments expanded enormously, especially in 1922, 1924 and again from the beginning of 1927 to the middle of 1928. All types of bond investments were favored in this development, but especially state and local bonds, railroad, public utility and other corporation securities and foreign securities, judging from the distribution of national bank investments.[2]

[1] Although urban realty values according to the index of the New York Federal Reserve Bank have been maintained at the high level reached in 1920, farm realty values according to the index of the U. S. Department of Agriculture have undergone a persistent decline. See Carl Snyder, "The Measure of the General Price Level," *Review of Economic Statistics*, Vol. X, February, 1928, pp. 47–8.

[2] According to the classification of investments of National Banks published in "Annual Reports" of the Comptroller of Currency, 1928, p. 506, from June 30, 1920 to June 30, 1928, bank investments in state and local government bonds increased 114%; in railroad bonds, 63%; in public utility bonds, 162%; in other bonds and notes, 138%, and in foreign bonds, 128%. In 1920, investments in foreign bonds were only 5.8% of the total investments, and in 1928, 7.7%. National bank investments in United States Government securities increased 32% from 1920 to 1923, but since that time have shown little definite trend.

Loans on securities likewise were subject to extraordinary growth, with the principal gains taking place in 1922, 1924, 1925, 1927 and 1928. From the beginning of 1922 until the end of 1928, in fact, security loans of reporting member banks in leading cities rose from $3.6 billions to $7.1 billions.[1] Furthermore, in New York City alone, security loans by all banks, corporations and others, to brokers as reported by members of the New York Stock Exchange, increased from $1.2 billions to $6.4 billions in the same period,[2] and the effect of these loans was undoubtedly magnified by the increasingly rapid turnover of bank deposits in New York City and other centers, already referred to.

For the most part, therefore, the major direction of the flow of new bank credit has been into the security markets, and the abundance of funds was reflected until early 1928 in lower money rates for all types of long and short term borrowing, as can be seen from the course of monthly averages of money rates and bond yields from 1920 to 1928 in Table 26. In other words, the use of credit funds in the security markets by banks directly for their own investment or indirectly through security loans in addition to the ordinary supply of savings funds for such investment, substantially increased the active demand for securities, led to higher prices for them, and stimulated an enormous growth of new security flotations, both domestic and foreign.

Credit Expansion and America's International Financial and Trade Relations

With disrupted conditions existing in the chief capital markets in foreign areas throughout the period and particularly before 1925, and the favorable conditions prevailing in the United States, there can be no astonishment at the predominant position of the United States as a world capital center, absorbing large quantities of foreign security offerings at home, purchasing large blocks of outstanding foreign securities abroad, and financing to a considerable extent the world's

[1] Federal Reserve Board, "Annual Report," 1927, p. 112, and *Federal Reserve Bulletin*, Vol. 15, January, 1929, p. 15.

[2] *Ibid.*, p. 121, and p. 17.

Table 26: Indexes of American Financial Conditions, 1920–1928

(Source: U. S. Department of Commerce and the *Commercial and Financial Chronicle*)

Year (Monthly Averages)	Money Rates				Bond Yields		Stock and Bond Price Indexes		New Security Issues[4] (in millions of dollars)		
	Call Loans[1] Renewal %	Time Loans[1] 90 days %	Prime Commercial Paper[1] 4–6 months %	Prime Bankers' Acceptances 90 days[1] %	Liberty and Treasury Bonds[1] %	Average 60 High Grade Bonds[2] %	Combined Index 103 Stocks (Dollars per share)[3]	Combined Index 66 Bonds (Per Cent of Par)[3]	All Capital Issues	Domestic Capital Issues (Exclusive of Refunding)	Foreign Capital Issues (Exclusive of Refunding)
1920	7.8	8.3	7.5	6.1	5.5	5.8	..	..	334	270	33
1921	5.6	6.5	6.6	5.2	5.4	5.6	84.6	85.4	350	252	46
1922	4.3	4.6	4.5	3.5	4.4	4.9	97.1	94.9	436	302	56
1923	4.9	5.2	5.0	4.1	4.5	5.0	89.6	93.5	416	335	24
1924	3.1	3.8	3.9	3.0	4.1	4.8	88.7	95.7	529	382	84
1925	4.2	4.3	4.0	3.3	4.0	4.7	110.6	97.5	594	427	91
1926	4.5	4.6	4.4	3.6	4.0	4.5	113.6	99.2	619	432	96
1927	4.1	4.3	4.1	3.5	3.5	4.3	130.7	101.2	827	516	131
1928											
First six months	5.0	4.6	4.3	3.7	3.3	4.4	149.8	102.1	948	534	155
Last six months	7.1	6.8	5.4	4.5	3.5	4.6	161.5	100.3	706	586	66

[1] Compiled by the Federal Reserve Board, U. S. Department of Commerce, Bureau of the Census, *Survey of Current Business*, February, 1929, p. 127.

[2] Compiled by the Standard Statistics Company, *idem.*

[3] Compiled by the New York Trust Company, *ibid.*, p. 128.

[4] Figured from the *Commercial and Financial Chronicle* compilations, *Commercial and Financial Chronicle*, Vol. 128, Jan. 19, 1929, pp. 316–7, and Vol. 127, July 14, 1928, p. 170.

international trade. Nor can it be regarded as surprising that foreign funds have moved to the United States in large sums to purchase securities here or to participate in the gains of rising security values. The persistence of similarly favorable money market conditions in any important world center would have contributed notably to its international financial importance under like circumstances. Because of them in this particular case, however, an extraordinary international creditor position, acquired within the short period from 1914 to 1920, was permitted to continue and expand amazingly. In short, the importation of foreign securities into the United States was more definitely stimulated by domestic credit developments than was the importation of merchandise and services in maintaining the balance of international payments.

This does not imply that credit expansion in the United States had no effect upon productive activity and commodity prices, and hence upon the volume of merchandise imports. Even if the expansion of bank credit did concentrate in the security markets, some of it must have been drawn away into other channels, influencing prices and production there, and ultimately affecting American imports. This certainly must have resulted from new domestic security issues of corporations, and state and local governments. These security issues were floated mainly for plant expansion or public works, and the funds so obtained must have been employed to a large extent in these uses, in spite of the tendency for corporations to hold larger cash, call-loan and security reserves, a feature of recent corporate finance.

As a matter of fact, physical production and trade, as reflected by the various indexes in Table 27, have increased since the depression of 1920 and 1921, but not as fast as credit expansion. Construction and related industries have increased the most, a gain which unquestionably reflected the low cost of capital funds. Taken as a whole, however, credit expansion does not appear to have effected an industrial and trade expansion in lines which would greatly stimulate commodity imports. Such imports, as Table 28 indicates, have expanded but not rapidly enough to overtake exports.

Stated in another way, American demands for foreign products did not widen during the period sufficiently to overturn the balance of merchandise trade. To a large extent, foreign production and international trade were too thoroughly demoralized from monetary disruption and foreign enterprise too concerned with reconstruction and re-adjustment to take full advantage of the potential capacity of American markets. The American tariff, too, undoubtedly exerted an important restrictive influence. Furthermore, with the dis-

TABLE 27: INDEXES OF AMERICAN CREDIT EXPANSION, PHYSICAL PRODUCTION AND TRADE, 1920–1928

(Sources: Federal Reserve Board and U. S. Department of Commerce)
(Base, 1923–1925 average = 100)

Year (Monthly Average)	Credit[1] Expansion (Bank Deposits)	Industrial Production[2]			Building Contracts Awarded[2]	Marketings of Agriculture and Forest Products[3]				Wholesale Distribution[2]	Department Store Sales[2]
		Total-Industrial	Manufactures	Minerals		Total Agricultural	Animal Products	Crops	Forest Products		
1920	86	87	87	89	63	86	71	86	82	115	94
1921	81	67	67	70	57	98	82	100	70	87	87
1922	86	85	87	74	81	98	93	99	90	89	88
1923	93	101	101	105	84	93	100	92	99	100	98
1924	98	95	94	96	95	104	104	104	97	98	99
1925	108	104	105	99	122	103	96	104	104	103	103
1926	113	108	108	107	130	108	96	109	98	107	106
1927	117	106	106	107	128	112	97	113	93	103	107
1928	122	110	111	106	135	117	99	119	..	104	108

[1] Figure from Table 24, total bank deposits as of June 30th of each year.
[2] Compiled by the Federal Reserve Board, *Federal Reserve Bulletin*, Vol. 15, March, 1929, p. 191.
[3] Compiled by the U. S. Department of Commerce, Bureau of the Census, *Survey of Current Business*, February, 1929, p. 23.

organized productive conditions prevailing abroad, the increased foreign dependence upon American raw materials, foods and manufactures to which the war period had contributed was a continuous influence. Finally, aggressive efforts of American manufacturers to expand their foreign markets was another factor. Foreign demands for American exports, accordingly, were regularly insistent and supported an impressive export volume which could have been surpassed only by an extraordinary increase of merchandise imports.

The fact that increases in commodity prices were not widespread as a result of credit expansion was a further

factor which militated against an increase of merchandise imports relative to exports. While the growth of credit purchasing power may have prevented commodity prices from falling as low as they otherwise might have fallen, it does not appear that the general wholesale price movement, which should be noted in Chart 11, can be directly correlated with credit expansion.[1] Even the index of the general price level of the New York Federal Reserve Bank on the same chart, a composite index of prices of commodities at wholesale and

TABLE 28: INDEXES OF THE QUANTITY AND VALUE OF EXPORTS AND IMPORTS AND THE PER CENT IMPORTS WERE OF EXPORTS, 1920–1928

(Source: U. S. Department of Commerce)

(Base, 1923–1925 average = 100)

Year	Domestic Exports[1]		Imports[1]		Per Cent Imports Were of Exports[2] (Value)
	Quantity	Value	Quantity	Value	
1920	108	161	66	136	64.2
1921	94	98	75	65	55.9
1922	88	84	96	80	81.2
1923	90	92	100	98	91.0
1924	102	101	97	93	78.6
1925	108	108	103	109	86.1
1926	115	105	110	114	92.1
1927	124	107	112	108	86.0
1928[3]	130	113	113	106	79.8

[1] Bureau of Foreign and Domestic Commerce, "Commerce Yearbook," 1928, Vol. 1, p. 91.

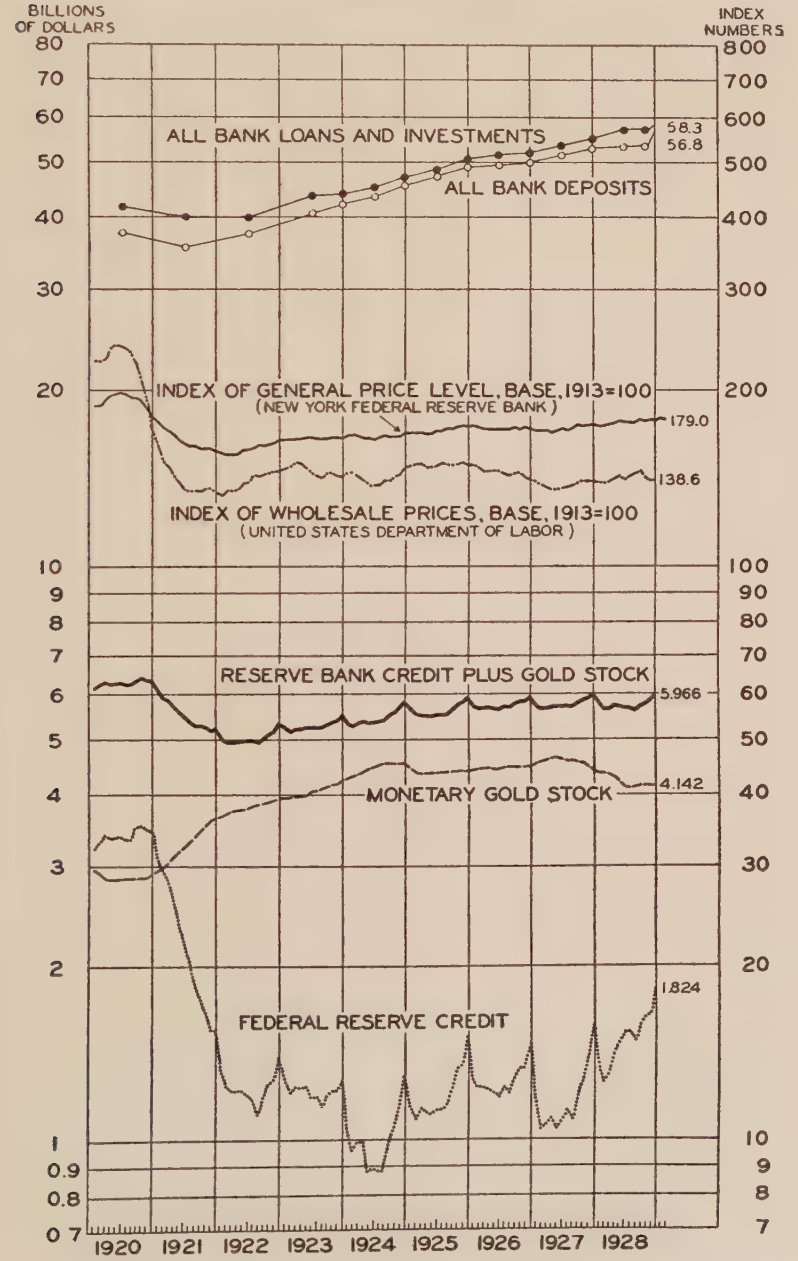
[2] *Ibid.*, p. 86.

[3] Preliminary figures.

[1] The explanation of the failure of the general commodity price level to rise must lie in the fundamental changes which have featured American industry since the war. Emerging from the war period with a greatly enlarged productive capacity, industry and agriculture have been confronted with problems of readjustment and the fullest possible employment of productive equipment and resources. Pressure has been exerted on all sides for the reduction of production costs by the application of scientific management, standardization and the adaptation of new machinery, a movement which has been stimulated in turn by the high level of wages which has been maintained and the low cost and ease of acquiring new capital funds which have contributed notably to plant extensions and equipment modernization. Emphasis has been widely placed upon large net profits through volume sales at small unit profit margins, and impressive advertising campaigns have been directed to increase sales volumes. Gross profits from sales relative to gross sales in many industries and in trade have tended to decline (U. S. Treasury Department, Bureau of Internal Revenue, "Statistics of Income, 1926," 1928, p. 15). Finally, depressed prices in foreign markets have exerted a downward pull upon the general commodity price level, particularly since the Bureau of Labor index number is heavily weighted with agricultural and raw material prices. All conditions have combined to cause intense competition, not only between individual producers but between industries.

Chart 11: The Credit Base of the United States, the Expansion of Bank Credit and Price Level Movements, 1920–1928

(Sources: Federal Reserve Board,[1] New York Federal Reserve Bank[2] and the U. S. Department of Labor[3])



[1] See Charts 6, 7 and 8.

[2] Revised index, *Review of Economic Statistics*, Vol. V, Feb., 1928, p. 49, and the New York Federal Reserve Bank, *Monthly Review*, 1928 and 1929.

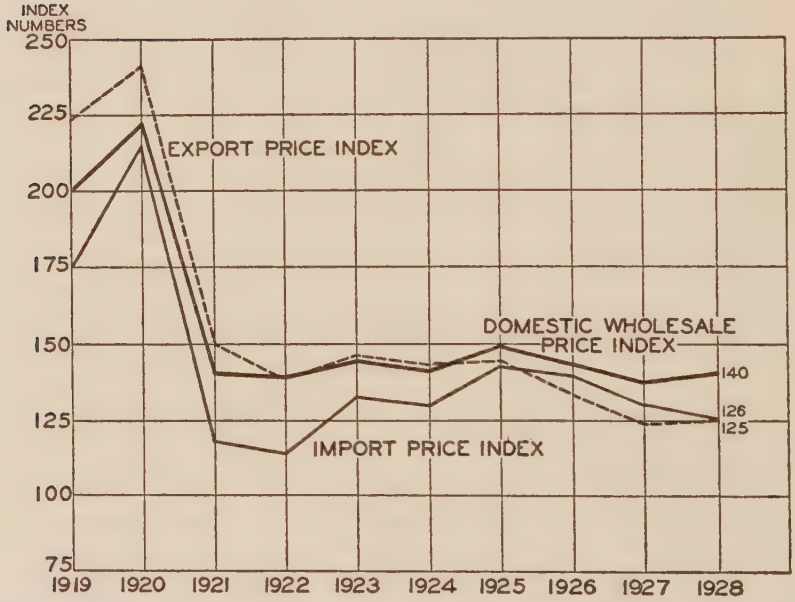
[3] Revised index on a 1926 base recomputed to a 1913 base.

retail services, securities and land values, while it has a regular upward slope owing to the influence of security prices and the high level of urban realty values, capital equipment prices and wages,[1] does not show the same rate of increase as bank credit, although its movement does correspond to the growth of the country's credit base.

CHART 12: THE MOVEMENT OF THE DOMESTIC WHOLESALE PRICE LEVEL COMPARED WITH THE LEVELS OF EXPORT AND IMPORT PRICES, 1919–1928

(Source: U. S. Department of Commerce)[1]

(1913 = 100)



[1] Bureau of Foreign and Domestic Commerce, "Foreign Trade of the United States in the Calendar Year 1928," *Trade Information Bulletin*, No. 602, p. 7.

Some pressure must have been exerted by expanding credit upon commodity prices in general, nevertheless. That this was so is indicated by Chart 12, which shows the movement of the Bureau of Labor wholesale price index relative to the Department of Commerce index numbers of export and import prices. Import prices were continually below the general

[1] Snyder, "The Measure of the General Price Level," *op. cit.*, pp. 47–51.

level of wholesale prices, especially from 1921 to 1925, while export prices until 1925 were usually slightly above. Ordinarily, such price movements would have had stimulating effects upon merchandise imports and retarding effects upon merchandise exports, but under the circumstances which obtained such causes did not lead to an import balance or a conspicuous trend in that direction. Furthermore, the decline of export prices after 1925 tended to encourage exports at the expense of imports. Factors previously mentioned were manifestly of greater moment in maintaining the "favorable" balance of merchandise trade.

The conclusion reached above that foreign security imports into the United States were more definitely stimulated by post-war credit expansion than were imports of merchandise and services, likewise carries no implication that the growth of credit purchasing power had no effect upon service imports. Certainly there must have been indirect influences, especially upon the more important service imports reflected through tourist expenditures and immigrant remittances. In so far as increasing money incomes of Americans were made possible from the diffusion of expanded credit, the accelerated growth of foreign travel and expenditure may be related to it. For similar reasons, a greater volume of immigrant remittances than otherwise would have occurred was probably made possible. Whatever the exact influence of credit expansion, to the extent that the size and course of these two main classes of service imports were affected, there was an increase in the adverse balance of service payments directly attributable to it.

Summary

The notable additions to America's international creditor position in recent years have necessarily been the result of forces both domestic and international in character. Foremost among the latter has been the enormous flow of gold to the United States. The principal causes of this concentration, it may be recalled, centered upon America's international creditor and trade position and the maintenance of a full gold standard, while conditions of monetary instability

prevailed in important foreign countries. Its effects, moreover, were to enable the commercial banking system at large to expand credit rapidly with a large degree of independence of Federal Reserve credit support. This does not mean that Federal Reserve credit was not significant. The amount of it outstanding in various years is abundant proof that it was, and justifies the following chapter, which is concerned with Federal Reserve bank operations and policies with regard to its use.

For a number of reasons brought out in the preceding analysis, the growth of credit purchasing power did not flow directly or even largely into commodity channels, although it probably checked in some measure lower commodity prices. It did exert a great deal of force, however, in the money and security markets, where money rates until the last half of 1928 were low, speculative activity marked, and new security flotations unprecedented. Out of this situation developed America's capacity to extend her international creditor position. Consequently, there was an outflow of long-term investment capital funds which exceeded the inflow in each year, but which, after 1922, did not wholly compensate the net inflow of long-term capital service payments. Hence, there was a net inward movement of all payments on long-term capital account, except for 1924, enlarged or even reversed in different years by the net movement of all payments on short-term capital account. Despite the net direction of all payments on capital account, however, and despite the influences of credit expansion upon commodity trade, a net export balance of merchandise was maintained. The difference was absorbed by an excess of service imports and by gold.

CHAPTER VII

FEDERAL RESERVE OPERATIONS AND INTERNATIONAL FINANCE

THE important part which Federal Reserve credit has played in the recent expansion of bank credit raises questions as to how and why this credit was made available to the banking organization at large. In other words, was the expansion in the use of Federal Reserve credit a consequence of deliberate promotive policies of Federal Reserve authorities? If not, to what extent was the employment of Federal Reserve credit restrained by Federal Reserve authorities? In what measure was its use determined by the needs of member banks in order to meet the demands of industry, trade and finance for commercial credit? And finally, to what degree did international influences determine the course of employment of Federal Reserve credit?

Consideration of these primary problems requires a brief examination of the constituent parts of outstanding Federal Reserve credit, together with the formulated policies and mechanism of control applicable to each, and a discussion of the broader economic and financial factors, especially of an international character, which Federal Reserve authorities were compelled to take into account in determining their policies. Certain inferences may then be drawn with regard to the validity of the popular belief that the expansion of the country's international creditor position since the war period has been the result of the arrival at an advanced industrial stage where capital exports are to be regularly expected; or whether, on the contrary, extraordinary and unprecedented circumstances, so prominent in the early transformation to an international creditor position, have continued to play the determining rôle in the subsequent creditor growth.

Factors in the Variation of Federal Reserve Credit

Federal Reserve credit is placed at the disposal of the banking system in three principal ways: (1) through direct borrowing by member banks; (2) through purchases of United States Government securities in the open market by Reserve banks; (3) through purchases of bankers' acceptances in the open market. All three necessarily affect reserve balances of member banks, although the latter two less directly than the first. It is essential for the present study, therefore, that they should be treated together.

Reserve Bank Influence upon the Volume of Reserve Credit

Under the organization of the Federal Reserve System, the discounting of commercial paper by member banks depends upon the latter's own initiative. The eligibility of the commercial paper discountable is defined by the Federal Reserve Board in accordance with the powers granted by the Federal Reserve Act, and Reserve banks scrutinize all offerings of paper in accordance with these rules. The means of checking the volume brought by member banks for rediscount centers chiefly in the rediscount rates maintained by Reserve banks.[1] The Reserve banks, however, finding it impractical to maintain discount rates at levels which would prevent all rediscounts by member banks for profit, have endeavored to restrain a too frequent exercise of the privilege by consulting directly with the member bank in question.[2] When such "moral suasion" is resorted to, an explanation is offered of the Reserve System's attitude on the legitimate use of its credit, but the adjustment is left to the discretion of the particular member bank. Continuous borrowing by a single member bank is thus restrained.

In buying or disposing of government securities in the open-market, as distinguished from rediscount operations,

[1] While rediscount rates among various Reserve banks are not always uniform, they have been generally synchronized in recent years. See the table of discount rate changes, Federal Reserve Board, "Annual Report," 1927, p. 89, and various issues of the *Federal Reserve Bulletin*, Vols. 14 and 15.

[2] Testimony of the late Governor Benjamin Strong of the New York Federal Reserve Bank and Governor George W. Norris of the Philadelphia Federal Reserve Bank. Committee on Banking and Currency, House of Representatives, "Stabilization Hearings," H. R. 7895, 69th Congress, 1st Session, pp. 393 and 456. See also Federal Reserve Board, "Annual Report," 1926, pp. 3–5 and 1928, pp. 8–9.

the Reserve banks take the initiative. Hence, such purchases or sales constitute positive action on their part with regard to credit conditions. From many angles, purchases and sales of government securities in the open-market constitute the most powerful instrument of policy possessed by the Reserve banks. The extensive application of this policy, however, except during the early years of the Reserve System's existence, has been confined to recent years, notably since 1922. Since that time it has constituted a significant phase of Reserve credit operations and has been supervised by an Open Market Committee of five Reserve Bank governors.[1]

On the other hand, the acquisition of bankers' acceptances, more like rediscounts, depends upon the initiative of the market bill brokers and member banks who have them in stock. Reserve banks ordinarily stand ready to buy all acceptances offered in accordance with eligibility rules defined by the Federal Reserve Board, but at rates which Reserve banks specify. Since the drawing of such bills varies directly with the volume of goods in shipment, especially in foreign shipment, their amount outstanding, and likewise the amount offered to the Reserve banks, is highly seasonal. In fact, the seasonal movement of acceptance holdings goes a long way to explain the seasonal changes in all Reserve credit. Reserve banks, of course, do influence the amount offered at particular times through the determination of their buying rates.[2] That is, if their buying rates are lower than the market rate, more bills will be brought to them, and if higher, fewer bills will be brought to them.[3] Thus, Federal Reserve buying rates for bankers' bills normally have a close interrelationship with market rates and may at times determine them. The principal variation in the acceptance holdings of Reserve banks, therefore, is both in response to market demand and to Reserve bank rate policy.

Unlike discount rates, the actual Reserve bank acceptance buying rates are not fixed with the approval of the Federal

[1] Federal Reserve Board, "Annual Report," 1923, pp. 12–3.

[2] Testimony of Governor Strong, "Stabilization Hearings," *op. cit.*, p. 315.

[3] *Ibid.*, pp. 316–9.

Reserve Board, the latter merely approving the minimum rates at which they may be bought.[1] The actual rates, therefore, are established by individual Reserve banks in conformity with broader credit policies and vary slightly with the maturity of the bills. Inasmuch as dealing in these bills tends to concentrate in the larger financial centers, the Open Market Committee often takes the offerings on joint account for the various Reserve banks of the System.[2]

The Character of Reserve Credit Tactics

It is clear from the foregoing summary that, governed by the very nature of the channels open for the release of Federal Reserve credit, credit policies are necessarily both active and passive. They may also be either promotive or conservational. In the past, two or more phases of policy have often overlapped and merged, obscuring a consistent course. It is enough for present purposes, however, to establish merely a general consistency which may be interpreted in the light of the wider influences upon which policies were based.

The course of Federal Reserve credit may be observed on the accompanying charts. Chart 13 indicates the movement of Reserve credit released through the three possible channels compared with the trend of member bank reserve balances. Chart 14 compares the discount rate of the New York Federal Reserve Bank with prevailing open market rates for commercial paper and bankers' acceptances and shows the tendency of the discount rate to be held between the latter two. On Chart 15, the movement of all member bank rediscounts is related to the average discount rate of all Reserve banks and to the Reserve bank holdings of government securities, and on Chart 16, the movement of acceptance bill holdings is related to the average acceptance rates charged by Reserve banks. It remains to correlate the course of Reserve credit as a whole with that released through the different channels and with the movement of gold in order to reach definite conclusions.

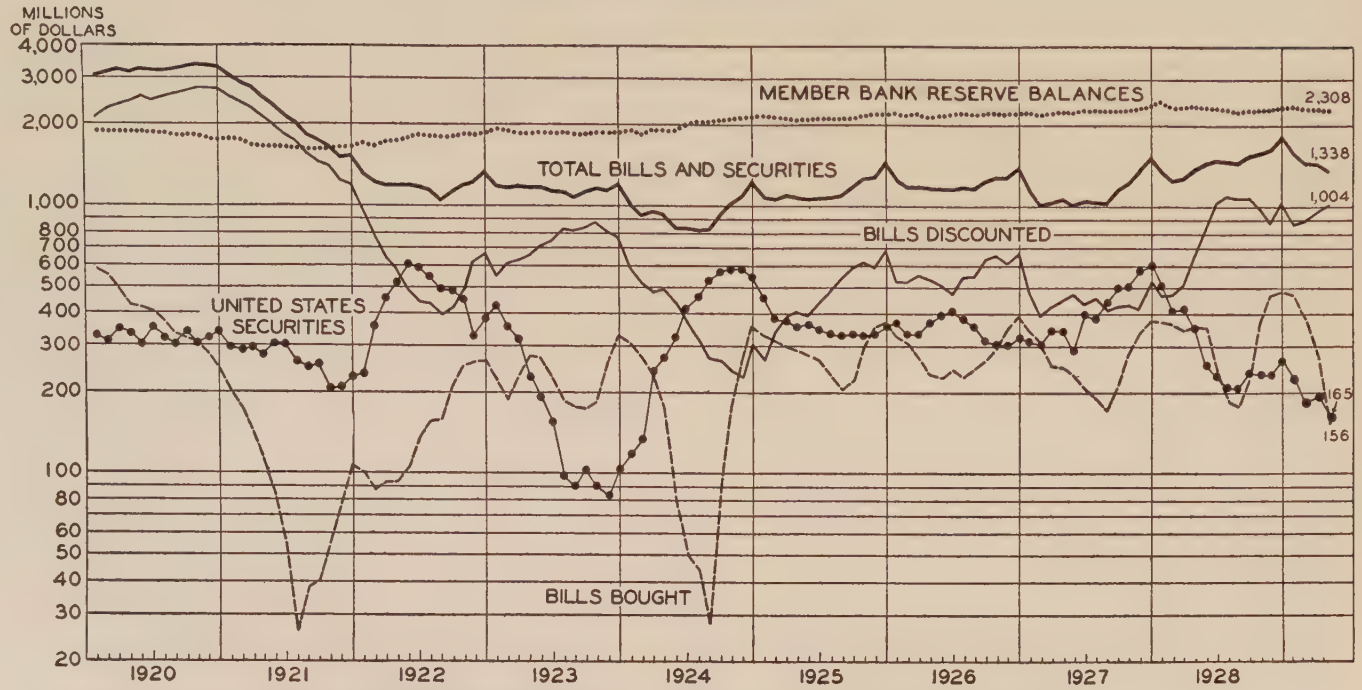
[1] Federal Reserve Board, "Annual Report," 1922, p. 18.

[2] Testimony of Governor Strong, "Stabilization Hearings," *op. cit.*, p. 316.

Chart 13: The Movement of Federal Reserve Credit and Member Bank Reserve Balances, 1920–1928

(Source: Federal Reserve Board)[1]

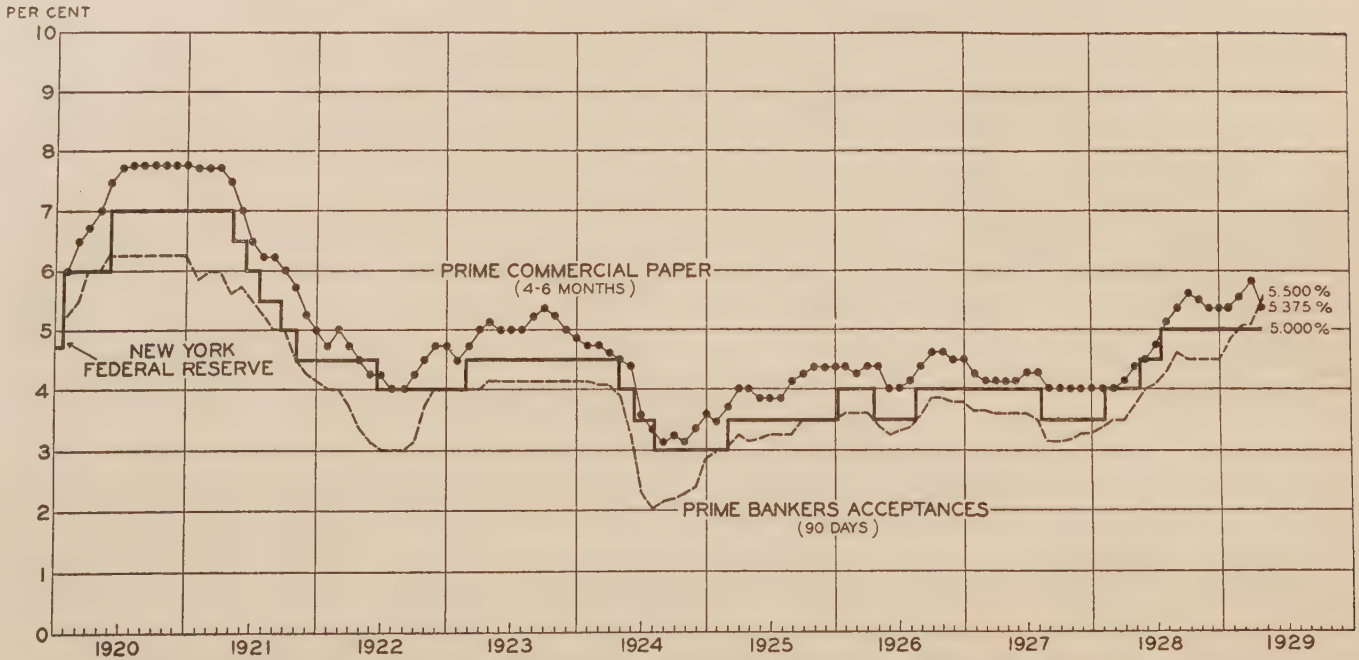
(Monthly averages of daily figures)



[1] "Annual Report," 1927, pp. 54–8, and *Federal Reserve Bulletin*, Vol. 15, Jan., 1929, p. 11, and May, 1929, p. 317.

Chart 14: The Discount Rate of the New York Federal Reserve Bank and Prevailing Money Rates in New York City for Prime Commercial Paper (4–6 Months) and Prime Bankers' Acceptances (90 Days), 1920–1928

(Source: Federal Reserve Board)[1]



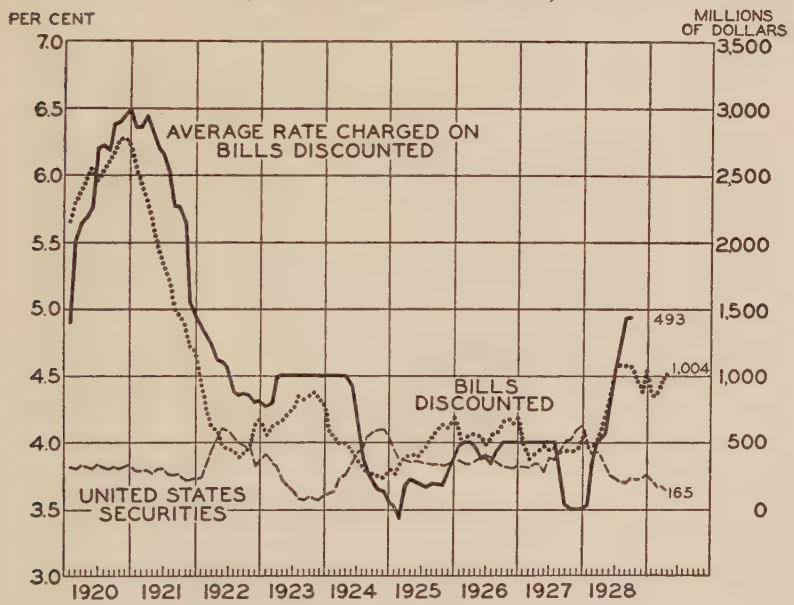
[1] "Annual Report," 1920, p. 60; *ibid.*, 1921, p. 33; *ibid.*, 1927, pp. 89, 95–6, and *Federal Reserve Bulletin*, Vol. 15, Jan., 1929, p. 13, and May, 1929, p. 319.

Determining Factors in the Volume of Reserve Credit

In the first two years of the period, 1920 and 1921, the Federal Reserve System endeavored to curtail the use of its credit through higher discount and acceptance rates, in order

CHART 15: AVERAGE RATES CHARGED BY RESERVE BANKS FOR REDISCOUNTS COMPARED WITH THE MOVEMENT OF ALL MEMBER BANK REDISCOUNTS AND RESERVE BANK HOLDINGS OF GOVERNMENT SECURITIES, 1920–1928

(Source: Federal Reserve Board)[1]



[1] "Annual Report," 1927, pp. 54–5 and 91 and the *Federal Reserve Bulletin*, Vol. 15, Jan., 1929, p. 11, and May, 1929, p. 317. Average rates charged for bills discounted during 1928 were furnished by the Division of Research and Statistics of the Federal Reserve Board.

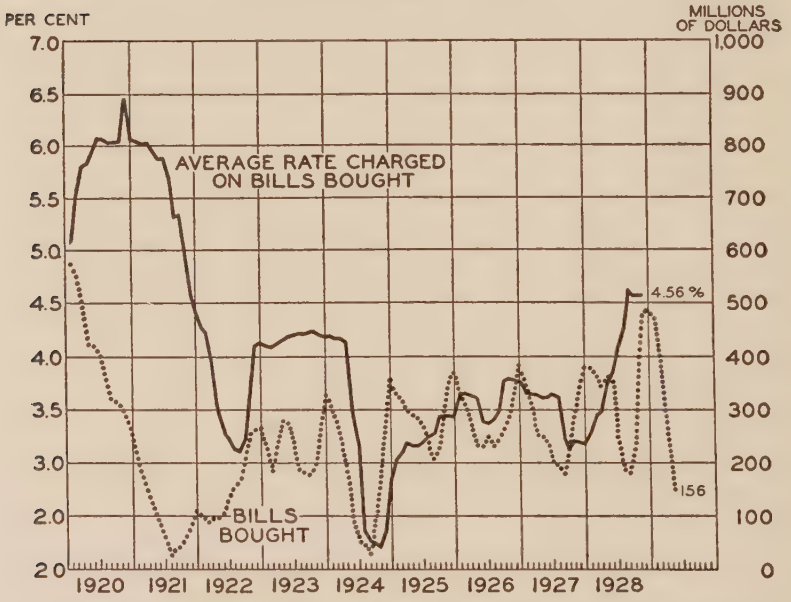
to preserve "the strength of the Federal Reserve banks, —the custodians of the lawful reserves of the member banks," and not "to deny proper accommodation to agriculture, commerce and industry."[1] The volume of government securities held by Reserve banks was relatively constant, although it was slightly reduced toward the end of 1921. Acceptance

[1] Federal Reserve Board, "Annual Report," 1920, p. 12.

holdings naturally fell off with the depression of business and the decline of acceptance financing. Finally, rediscounts receded for similar reasons and also because of the gold inflow, as was pointed out in the preceding chapter. Thus, all developments combined to reduce the volume of

CHART 16: AVERAGE RATES CHARGED BY RESERVE BANKS ON BILLS BOUGHT COMPARED WITH THE MOVEMENT OF RESERVE BANK ACCEPTANCE HOLDINGS, 1920–1928

(Source: Federal Reserve Board)[1]



[1] "Annual Report," 1927, pp. 54–5 and 91, and the *Federal Reserve Bulletin*, Vol. 15, Jan., 1929, p. 11, and May, 1929, p. 317. Average rates charged for bills bought during 1928 were furnished by the Division of Research and Statistics of the Federal Reserve Board.

Reserve credit outstanding, and the object of the higher discount and acceptance rates was attained. Member bank reserve balances contracted, but not in proportion to the contraction of Reserve credit.

With the decline of rediscounts and bill holdings, discount and acceptance rates also declined, the former averaging below 4½% after the middle of 1922 and the latter falling to

almost 3% even earlier, continuing low until the end of the year. While discount rates followed the decline of rediscounts, the low acceptance rates of 1922 accompanied a continuous increase in the acceptance portfolio of the Reserve System, reflecting an effort to stimulate offerings to Reserve banks. At least the low buying rates for acceptances accompanied extensive purchases of government securities by individual Reserve banks with the avowed purpose of restoring earning assets,[1] a development which in turn contributed to the decline of rediscounts and subsequent reductions in discount rates. The policy was finally relinquished with the reversal of the program of security purchases and the organization of the Open Market Committee of the Reserve System.[2]

Whatever weight may be attached to the confusion of policy in 1922, the fact remains that because of the tactics pursued, supplemented by the business recovery, the contraction of Reserve credit came to an end. Owing to these tactics, furthermore, and because of the gold inflow, member bank reserve balances increased. The post-war expansion of commercial bank credit, it may be recalled, dates from this year.

While discount rates were raised to 4½% early in 1923 and acceptance rates were kept slightly above 4%, government securities were liquidated, with a corresponding increase in rediscounts, in order to test the volume of Reserve credit in use.[3] Although gold imports were large, the steady business recovery, requiring as it did larger amounts of currency in circulation, prevented an expansion of member bank balances.[4] Nevertheless, the level of those balances was maintained and there was no apparent disposition for Reserve banks to take more determined steps to restrain the Reserve credit obviously employed in supporting them.

In 1924, government securities were again purchased extensively, followed by reduction in discount and acceptance

[1] Testimony of Governor Strong, "Stabilization Hearings," *op. cit.*, p. 309 and Federal Reserve Board, "Annual Report," 1922, p. 4.

[2] Testimony of Governor Strong, "Stabilization Hearings," *op. cit.*, p. 309 and the testimony of Adolph C. Miller of the Federal Reserve Board, pp. 864–5.

[3] Federal Reserve Board, "Annual Report," 1923, pp. 14–5.

[4] *Ibid.*, p. 2.

rates. Rediscounts declined in a compensatory fashion, and no expansion of Reserve credit followed. In fact, the latter even contracted slightly owing to the reduced holdings of acceptances because of the greater market demand for them, a development which led to extremely low acceptance rates until these holdings were increased. Naturally, such promotive policies induced member banks to add gold imports to their reserve balances.[1]

Promotive strategy gave way to conservational tactics in 1925 when government securities were partly liquidated. Gold withdrawals led to increased rediscounts to maintain member bank reserves, although Reserve credit released through acceptances also contributed to this end. The low level of discount and acceptance rates did not evidence efforts to conserve Reserve credit directly through them. In 1926 and the first half of 1927 a status quo virtually obtained so far as Reserve credit policies were concerned. Rate changes were minor and open market operations almost wholly passive. The most aggressive action was the purchase of $60 millions of gold in London and its deposit abroad in order to prevent its importation into the United States early in May, 1927, and the purchase of securities later in the same month when gold was earmarked for the Bank of France.[2] Nevertheless, gold inflows which did occur contributed to the slight growth of member bank reserves, as did also a contraction of currency in circulation.[3]

Beginning in the middle of 1927 and continuing until the end of the year, all Reserve policies were promotive. Government securities were aggressively acquired, while discount and acceptance rates were concurrently reduced.[4] Although rediscounts declined with the former step, the decline did not wholly balance the amount of securities bought. Because of this and the considerable amount of Reserve credit supplied through acceptance purchases, additions were made to member bank reserve balances in spite of a very large exodus of gold.[5]

[1] Federal Reserve Board, "Annual Report," 1924, p. 12.
[2] Federal Reserve Board, "Annual Report," 1927, p. 10.
[3] *Ibid.*, p. 18.
[4] *Ibid.*, p. 10.
[5] *Ibid.*, p. 18.

Restraining checks followed in 1928 when Government securities were liquidated after the first of the year while discount and acceptance rates were simultaneously raised.[1] Since gold exports were continuing, rediscounts increased more than proportionately with the decrease in securities and remained high through the year. Member bank reserve balances declined under the pressure until the middle of the year when they tended to recover despite the second rise of the discount rates. The increased amount of Reserve credit provided by acceptance acquisitions together with the high level of rediscounts, a slight inflow of gold and a smaller demand for circulating currency enabled member bank reserve balances to be restored.[2]

While the general level of discount rates continued to be maintained after the beginning of 1929, acceptance buying rates were raised and acceptance purchases restricted to short-term maturities. A decline of acceptance holdings followed. Furthermore, additional liquidation of the security portfolio occurred. Finally, to cope with the enormous volume of rediscounts outstanding, the Reserve Board issued its warning of February 2, 1929, to member banks enlisting their cooperation in reducing them.[3]

Summary

Viewing the entire movement of Reserve credit, it may be said that before 1922 Reserve policies were directed towards restricting the employment of Reserve credit, but other factors as well caused its contraction. After that year, when uncertain tactics were followed and the banking system at large possessed an important degree of credit independence, restraining efforts were generally relaxed except through direct consultation with over-borrowed member banks. In 1924, efforts were made to extend the use of Reserve credit, an objective not achieved because of other factors operating. Finally, in 1927, all policies did promote an increase of Reserve credit, the checking of which was the foremost problem of 1928 and 1929.

[1] *Ibid.*, 1928, pp. 4–5.

[2] *Ibid.*, 1928, pp. 6–7.

[3] Quoted in the *Federal Reserve Bulletin*, Vol. 15, February, 1929, p. 94.

A number of specific questions arise which can be answered generally. Why were Federal Reserve authorities apparently satisfied with the volume of Reserve credit outstanding in 1923, in view of the action taken in 1922? Why did they attempt to stimulate the greater use of Reserve credit in 1924? Why were they content with the situation in 1925 and 1926? Finally, why did they seek to encourage an expansion of Reserve credit in 1927 followed by restraining efforts in 1928 and 1929?

International Influences in the Formation of Federal Reserve Policy

These questions involve the wider influences which affected the credit policies followed by the Federal Reserve System. The Reserve authorities were necessarily concerned with the gold concentration in the United States and the consequences of continued credit independence by the banking system, with the breakdown of the gold standard abroad, bringing in its train depreciated exchanges and difficulties to international trade, with the restoration of the gold standard, and with domestic business and credit developments. International and domestic business factors are always intermingled to some degree, but in the post-war period, those of international origin presented the most difficult problems, threatening even the maintenance of the gold standard in the United States.

Post-War International Finance and Federal Reserve Policy

With the war at an end, the United States the world's creditor to a large sum, and the gold standard generally abandoned abroad, it was necessary to anticipate the extent to which the United States would be called upon to supply additional capital to foreign countries. The Federal Advisory Council of the Reserve System in May, 1919, felt that the need of foreign areas for American products for reconstruction would exceed America's demands for foreign products, and that consequently American capital should be made available[1] to foreign countries through the purchase

[1] Recommendation of the Federal Advisory Council to the Federal Reserve Board, May 19, 1919, Federal Reserve Board, "Annual Report," 1919, p. 518.

of their government, municipal or public utility obligations.[1] Moreover, because of the adverse effects of depreciated currencies upon American foreign trade, it was asserted that actions should be directed to prevent the obstruction of foreign trade development.[2]

Hence the capital exports of 1919, resulting from the resumption of foreign security flotations, the continued credit extensions by the United States Treasury and official relief bodies, the extensive financing of foreign trade by American acceptances,[3] and the expansion of American banking corporations into the field of foreign banking,[4] were approved developments. Legislatively, efforts were made to secure the adoption of the Edge Act, which enabled Federal incorporation of concerns engaged in international finance under Federal Reserve supervision, as well as national bank investments in their ownership.[5]

At the close of the year 1919 it was recognized that the continued expansion of commercial credit and particularly its extension to foreign areas was an influence leading to higher prices.[6] Since the reserve position of the system was weakening, higher discount and acceptance buying rates were invoked, although the severity of subsequent liquidation and its world-wide extent was not anticipated. After the liquidation developed, it was evident that the major contributing elements were the abrupt contraction of world purchasing power and the persisting dislocation of the foreign exchanges. Concerning the serious situation which prevailed in 1920, the Federal Reserve Board expressed itself as follows:[7]

> "We find ourselves . . . with a large export trade which is being paid for only in part by a great portion of the world, and this trade is fast approaching a point where it may be cut drastically to the most vital essentials unless the normal credit and buying power of Europe can be restored. This restoration can be accomplished only over an extended period of time if our raw materials go forward in a steady stream against long-term credits. Foodstuffs may be furnished also

[1] *Ibid.*, p. 519.
[2] *Ibid.*, p. 520.
[3] *Ibid.*, 1918, pp. 18–24, and 1919, pp. 21–3.
[4] *Ibid.*, 1918, pp. 59–61, and 1919, pp. 53–4.
[5] *Ibid.*, 1919, pp. 55–6 (Act approved Sept. 17, 1919).
[6] *Ibid.*, pp. 72–3.
[7] *Ibid.*, 1920, p. 22.

> and except where shipped by relief organizations they should in the main be paid for promptly as they go into immediate consumption. We are, therefore, brought face to face with the problems of how we can best extend long-time credits to European countries in order to enable them to reconstruct their industries and how we can best extend credit to other countries in order to enable them also to make shipments to Europe which otherwise would be made to the United States and glut our domestic markets."

The facts of the case were simply this: With tighter money conditions obtaining in the United States, long-term foreign borrowing declined. These developments occurred, moreover, at a time when the Government was terminating war and relief credit arrangements with foreign governments. Enormous sums, therefore, became due on American exports which were supplied either on open book account or financed through acceptances. This current indebtedness, plus the necessity for European countries to amortize maturing long-term loans contracted during the early war period, was the occasion for the beginning of the gold inflow, introducing an entirely new set of considerations upon which Federal Reserve credit policies had to be formulated. The rising reserve ratio which followed and the desire to increase American capital exports in order to stimulate American export trade were unquestionably influences in the reduction of rediscount and acceptance buying rates which began in 1921.[1]

The Gold Factor and the Readjustment of Credit Policy

Confronted with a confusing situation characterized by violent disturbances in international money values, the persistent inflow of gold, and declining earning assets, Federal Reserve banks pursued a hesitant policy in 1922. Despite the belief of the Federal Advisory Council that Reserve bank operations should not be dictated by the accumulation of idle funds,[2] it was plain from open market operations and admitted tactics, that declining earning assets were of pre-

[1] Recommendations of the Federal Advisory Council, May 17 and September 20, 1921; Federal Reserve Board, "Annual Report," 1921, pp. 685–6 and 690.

[2] November 21, 1921, *ibid.*, p. 691; April 28 and September 26, 1922, *ibid.*, 1922, pp. 410–411 and 413.

dominant concern.[1] The organization of the System's Open Market Committee in 1922 in order to coordinate open market activities was a partial recognition of the anxiety of Reserve banks over their earning assets, while the reorganization of the Committee by the Board early in 1923 was a final admission of the necessity for open market operations in accordance with a general credit policy in order to avoid a secondary expansion of credit.[2]

With the continued increase of the Reserve System's gold reserves, it became necessary to relinquish the gold reserve ratio as a guide to credit policy and to work out entirely new bases for a credit program. These were described in the Federal Reserve Board's "Annual Report" for 1923. They are important both because they were reflections of international influences and because they are keys to the apparent willingness of Reserve authorities to see the volume of Reserve credit outstanding in 1922 remain in 1923. Moreover, they provide an insight into subsequent policies. The Reserve Board stated:[3]

> "The reserve ratio can not be expected to regain its former position of authority until the extraordinary gold movements which, in part, have resulted from the breakdown of the gold standard, have ceased and the flow of gold from country to country is again governed by those forces which in more normal and stable conditions determine the balance of international payments. The gold standard as a regulatory influence cannot be effective for one country alone, no matter how impregnable its gold position."

Accordingly, the revised basis for credit policy was found to lie "in the promptness and the degree with which the flow of credit adapts itself to the orderly flow of goods in industry and trade."[4] Moreover, "so long as this flow is not interrupted by speculative interference there is little likelihood of the abuse of credit supplied by the Federal Reserve banks, and, consequently, little danger of the undue creation of new credit." Hence, "the volume of credit will seldom be at variance with the volume of credit needs so long as, (1) the

[1] Testimony of Governor Strong, "Stabilization Hearings," *op. cit.*, pp. 309–10 and Adolph C. Miller of the Federal Reserve Board, pp. 864–65. See also: Federal Reserve Board, "Annual Report," 1923, pp. 13–4.

[2] *Idem.*

[3] Federal Reserve Board, "Annual Report," 1923.

[4] *Ibid.*, p. 34.

volume of trade, production, and employment, and (2) the volume of consumption are in equilibrium." Finally, it was held that such a program could be based upon ascertainable statistical facts, although judgment was required in their interpretation.[1]

Since the Reserve authorities saw no reason to endeavor to reduce the employment of Reserve credit in 1923, it may be assumed that they concluded the proper adjustment obtained. They might, however, have offered more strenuous measures had the use of Reserve credit increased rapidly. Their attitude toward its further use was clearly one of conservation in order to maintain surplus gold reserves for later redistribution through exports:[2]

> "By virtue of its creditor position and its unprecedentedly strong gold position, the United States has now become the world's gold center. As such it has assumed the high responsibility of so managing the vast gold supply domiciled here that it may be available for redistribution by export as occasion may arise without producing any untoward or disturbing effects in our own domestic, economic and financial situation."

The Problem of the Gold Standard and the Stabilization of International Trade

Obviously, this statement anticipated a return to the gold standard by countries with unstabilized currencies. Certain steps had already been taken by a few countries, but experiments looking toward a return to gold had been relatively minor. The situation was extremely complex. American flotations of foreign securities had not expanded greatly in 1922 and 1923. Moreover, purchases by foreigners of their own and American securities had been large in both years, and together with the net flow of payments on long-term capital service account and of all payments on short-term capital account, offset the outflow of investment capital, a situation reflected in the persisting imports of gold. The Federal Advisory Council expressed the seriousness with which the international situation was viewed at the time of the completion of the Dawes Report:[3]

[1] *Ibid.*, pp. 35–7.

[2] *Ibid.*, p. 22. The substitution of gold certificates for Federal Reserve Notes from the end of 1922 to the middle of 1925 was a reflection of this attitude.

[3] May 14, 1924, Federal Reserve Board, "Annual Report," 1924, pp. 280–281.

"Unless America finds ways and means to permit her excessive banking strength to benefit other countries, particularly those striving to bring their house in order, the dollar can not maintain its position as a world standard for exchange, and foreign countries—and even American banking and commerce—will, once more, in a larger degree become dependent upon and tributary to the pound sterling, to the greater exclusion of the dollar. It is idle, however, to preach the use of the dollar, unless at the same time we render it possible for other countries to avail themselves of our dollar facilities. It is obvious that our credit power can not continue to grow indefinitely without danger of oversaturation. If the stream of gold that floods our shores is not stemmed in time, it is to be feared that ultimately we will not be able to ward off its inflationary effects. Credit and currency inflation would only aggravate the economic maladjustment already existing within our boundaries, a maladjustment which not only disturbs and endangers our trade with other countries, but which makes our agricultural situation particularly difficult and distressing."

The problem, thus, was twofold, involving the protection of American foreign trade from the effects of foreign monetary disturbances and protection of American finance from over-extension and even inflation. The flotation of a share of the German loan proposed by the Dawes Commission, consequently, was approved, and the extension of other foreign credits, both long and short term, was recommended.[1] Hence, the 1924 policy of open market acquisition of government securities initiated by Reserve banks, a policy previously suggested by the Federal Advisory Council,[2] and the lowering of Reserve discount and acceptance rates was unqualifiedly affirmed:[3]

"In the opinion of the council, there does not seem to be any room for doubt with regard to the policy which in these circumstances the Federal Reserve System should pursue."

The considerations which entered into the 1924 operations of Reserve banks are further amplified by a statement read by the late Governor Strong of the New York Federal Reserve Bank before the House Committee on Banking and Currency in its "Stabilization Hearings" in 1926. It clearly shows the predominant influence of international factors:[4]

"(1) To accelerate the process of debt repayment to the Federal Reserve banks by the member banks so as to relieve this weakening pressure for loan liquidation.

[1] *Ibid.*, pp. 280–282. [2] February 19, 1924, *ibid.*, p. 278.
[3] *Ibid.*, p. 282. [4] "Stabilization Hearings," *op. cit.*, p. 336. See also pp. 335–9.

"(2) To give the Federal Reserve banks an asset which would not be automatically liquidated as the result of gold imports so that later, if inflation developed from excessive gold imports, it might at least be checked in part by selling these securities, thus forcing member banks again into debt to the Reserve banks and making the reserve bank discount rate effective.

"(3) To facilitate a change in the interest relation between the New York and London markets, without inviting inflation, by establishing a somewhat lower level of interest rates in this country at a time when prices were falling generally and when the danger of disorganizing price advance in commodities was at a minimum and remote.

"(4) By directing foreign borrowings to this market to create the credits which would be necessary to facilitate the export of commodities, especially farm produce.

"(5) To render what assistance was possible by our market policy toward the recovery of sterling and the resumption of gold payment by Great Britain.

"(6) To check the pressure of the banking situation in the West and Northwest and the resulting failures and disasters."

The results of the open-market operations of 1924 were felt to have justified them in every respect. They freed member banks of indebtedness and permitted lower open-market interest rates to develop as the continued gold inflow was added to reserve balances. According to Governor Strong:[1] Domestic conditions became more stabilized; foreign financing was greatly increased, of special importance to the movement of crops owing to the necessity for unprecedented European purchases because of crop failures; domestic financing by corporations was stimulated; larger inflows of gold were prevented; the recovery of sterling reached a point where it was possible to consider the resumption of gold payments; and finally the currencies of Sweden, the Netherlands and Switzerland returned to their gold parities while the Austrian and Hungarian currencies were able to remain stabilized, and steps were taken toward the application of the Dawes Plan for German stabilization.

The Federal Reserve Board, similarly, reviewed the accomplishments of the year.[2] The enormous increase in foreign flotations was regarded as a factor in foreign purchases of American goods and especially in supporting the exchange

[1] *Ibid.*, pp. 336–9. [2] Federal Reserve Board, "Annual Report," 1924, pp. 9–10.

value of foreign currencies and in the withdrawal of gold for monetary reconstruction in the last few months of the year. The responsibility for the low money rates, however, was not assumed, the emphasis being laid upon the primary influence of the gold inflow. The ease of money, nevertheless, was of profound international importance. It "facilitated foreign borrowing and this contributed to making the dollar credits and gold available to those countries which have undertaken to re-establish sound monetary conditions."

Direct Cooperation in the Restoration of the Gold Standard

In the fall of 1924, the Federal Advisory Council, explicitly alarmed over the possible inflationary consequences in American commodity markets of a persisting plethora of credit funds, suggested that the problem of dealing with the restoration of the gold standard be approached by a new avenue rather than by further security purchases in the open market in the following resolution:[1]

> "That this council recommend to the Federal Reserve Board to consider the question whether the time has come for Federal Reserve Banks to exercise their power to invest some of their funds in foreign bills with approved American banking indorsements and payable by and repayable to Federal Reserve Banks in dollars.
>
> "The council believes that observing these safeguards and by properly scattering its purchases the Federal Reserve System can safely invest substantial accounts abroad, without any risk of loss on account of exchange or otherwise, and in doing so ward off to that extent the inflow of gold, incidentally assisting the foreign countries involved in their efforts to stabilize their exchanges and to bring them back to definite gold relations."

Subsequently, in view of the powers granted by the Federal Reserve Act to deal in gold at home or abroad, to open accounts with foreign central banks and to employ funds in foreign countries by purchasing bills,[2] together with the implied power of accomplishing these ends not only directly but by contract and on time,[3] the Federal Reserve banks entered into a number of arrangements with foreign central banks.[4] For example, gold loans were granted to the Bank of Poland

[1] September 25, 1924, *ibid.*, p. 283. [2] Federal Reserve Act, Section 14.

[3] Testimony of Governor Strong, "Stabilization Hearings," *op. cit.*, pp. 500–2.

[4] Federal Reserve Board, "Annual Report," 1925, pp. 11–14.

and the banking office of the Ministry of Finance of Czechoslovakia. Secondly, a $200 million gold credit was granted by the Reserve banks jointly to the Bank of England, commencing May, 1925, and lasting two years, whereby the Reserve banks agreed to advance gold in exchange for a Bank of England deposit if called upon, simultaneously with a $100 million credit arranged by the British Government with private American bankers.[1] Finally, arrangements were made by Reserve banks to buy prime commercial bills up to $5 millions from the Bank of Belgium, when and if desired.[2]

Of these international credit arrangements the one granted the Bank of England was not only the most conspicuous but the most important because the stabilization of other currencies was related to it. Regarding its purpose, Governor Strong said:[3]

> "This credit really helps us to do two things: Reestablish the gold standard abroad; justify our continuance as the important center which the war forced us to become. The importance of re-establishing this stability and of doing so in one of the world's principal money markets at the outset, cannot be exaggerated. It is the start in re-establishing world-wide stability. It means the elimination of speculative hazards in international purchases and sales of goods which have been a restricting and withering influence upon trade ever since the war started. The determination to resume a free gold market in London means ultimate world-wide establishment of the gold standard, and only action by the Bank of England to that end could give the world assurance that sound monetary policies would be resumed throughout the world."

The influence of the Federal Reserve's support of the Bank of England was held to have been immediately felt in the resumption of gold payments in Holland, Switzerland, the Dutch East Indies, Australia and New Zealand, while South Africa and Sweden were said to have acted in anticipation.[4] The Federal Advisory Council in expressing its approval asserted:[5]

> "For the United States this development is of the vastest importance: First, because we own approximately one-half the world's

[1] *Idem.*, and "Stabilization Hearings," *op. cit.*, pp. 494–502.

[2] "Stabilization Hearings," *op. cit.*, p. 519.

[3] *Ibid.*, p. 507.

[4] *Ibid.*, pp. 508–509.

[5] May 22, 1925, Federal Reserve Board, "Annual Report," 1925, pp. 288–9.

monetary gold; second, because in order to preserve for ourselves conditions of well-balanced prosperity, foreign markets absorbing our surplus production are an imperative necessity and it is idle to expect that without exchange stability the purchasing power of foreign countries may regain its full capacity; third, in present world conditions the sale of our most vast excess production to foreign buyers can only be maintained on anything like the present scale as long as we continue freely to absorb foreign securities. Our ability to do so, however, will depend upon the degree of credit these foreign countries will command here. We have, therefore, a vital interest in seeing the credit of our customers placed on the strongest possible basis.

"... a true picture of the outlook is gained only if one considers what might have happened had England decided to continue the embargo on gold exports instead of restoring a free gold market. It would not seem an overstatement to assume that in such a case the world might have suffered another exchange collapse with all the uncertainty to trade which that implies; that private and public credit in foreign lands would have been impaired and that instead of making efforts to balance budgets by taxation, the temptation for debasement of currencies would have continued indefinitely. In such circumstances true wages, and with that, living standards in competing countries would have been reduced. We are familiar with the social consequences that would result from such conditions, and it is safe to conclude that we ourselves could not have escaped the effects of such a development which, among other things, would have involved a further addition to our gold holdings."

Owing to the fact that the Bank of England credit was not used and no commercial bills were discounted for the Bank of Belgium, only the gold loans to Poland and Czechoslovakia affected the volume of Reserve credit, and they affected it but slightly. In view of the urgency with which such credits had been recommended and the concern expressed over the imminent dangers of the credit situation at the end of 1924, it might have been expected that, with the consummation of the initial steps to reestablish the gold standard, strenuous efforts to curtail the employment of Reserve credit would have followed in 1925. The task of aiding the reconstruction of the gold standard with American credit, however, was apparently not regarded as completed.

Reserve Credit Policy and the Final Restoration of the Gold Standard

The alarm evidenced by the Federal Advisory Council at the close of 1924, consequently, was not reflected in recom-

mendations that aggressive conservational policies be pursued by Reserve banks, although they did call for a reversal of open market operations and for the increase of the New York discount rate from 3% to 3½%.[1] While this program was followed, the security portfolio was only partially liquidated and no effort was made to reduce holdings of acceptances. Moreover, discount rates were stabilized until the end of the year when those in financial centers were moved up to a level of 4%,[2] while acceptance rates were adjusted upward after the middle of the year. The volume of Reserve credit outstanding was evidently not regarded seriously. Much more important was the favor with which the continued foreign lending was viewed, particularly as a contributing influence to currency stabilization[3] and the redistribution of gold.[4]

Much the same position and viewpoint obtained in 1926 when discount rates were generally maintained at 4%, except for New York in the spring months. The outlook for foreign financing was pronounced especially promising at the beginning of the year, with government debt funding agreements with both Italy and France in sight.[5] At the end of the year, the Federal Reserve Board observed the virtual cessation of gold imports from Europe, accounted for by improved monetary conditions and the willingness of American investors to absorb a large volume of foreign loans, both public and private.[6] The fact that many of the loan proceeds remained in the United States as dollar balances of foreign borrowers, corporations and commercial banks as well as of foreign central banks was indicated to show the remaining potential demand for American gold and the incompleteness of the redistribution process.[7] While direct cooperation with foreign central banks in reestablishing the gold standard through credit arrangements was not a feature of Reserve policy during this year, at least one credit was

[1] November 24, 1924, Federal Reserve Board, "Annual Report," 1924, p. 283.

[2] September 21, and December 1, 1925, Federal Reserve Board, "Annual Report," 1925, pp. 288 and 291.

[3] February 16, 1925, *ibid.*, pp. 284–5.

[4] *Idem.*

[5] February 15, 1926, *ibid.*, 1926, p. 484.

[6] *Ibid.*, p. 15.

[7] *Ibid.*, p. 16.

extended to the Bank of Belgium to purchase prime Belgian bankers' bills up to $10 millions, if requested.[1]

No change in Federal Reserve credit policy appeared in the first half of 1927, operations being directed at a maintenance of the volume of Reserve credit outstanding. Recurring gold imports, however, presented a serious problem, and only the purchase of $60 millions of gold in the London open market in the early part of May prevented them from being larger, a transaction accompanied by security sales in the American open market to absorb Reserve credit released in the deal.[2] When the Bank of France had large amounts of gold earmarked for its account later in May, securities were purchased to offset any possible money stringency.[3] The volume of Reserve credit then outstanding, therefore, was plainly regarded as essential.

Commencing in June, 1927, the Reserve banks increased their holdings of government securities and in August, discount rates were lowered generally to 3½% with acceptance rate reductions at the same time. According to the Federal Reserve Board:[4]

> "This policy was adopted by the System in consideration of the recession in business in the United States, of the relatively heavy indebtedness of member banks, and of the tendency toward firmer conditions in the money market. During this period it also became evident that there was a serious credit stringency in European countries generally, and it was felt that easy money in this country would help foreign countries to meet their autumn demand for credit and exchange without unduly depressing their exchanges or increasing the cost of credit to trade and industry. Easier credit conditions abroad would also facilitate the financing of our exports and would thus be of benefit to American producers. By purchasing securities at that time the Federal Reserve Banks were in fact successful in easing the condition of the money market and in exerting a favorable influence on the international financial situation."

The initiation of this aggressive Reserve action, however, coincided generally with a visit of the Governor of the Bank of England, Mr. Montague Norman, the President of the German Reichsbank, Mr. Hjalmar Schacht, and the Deputy

[1] *Ibid.*, p. 14. Other credits were arranged by the Bank of Belgium with a group of European central banks and the Bank of Japan.

[2] *Ibid.*, 1927, p. 10.

[3] *Idem.*

[4] *Idem.*

Governor of the Bank of France, Professor Charles Rist, who "were all pretty much concerned for one reason or another with the way in which the gold standard was then working,"[1] and who jointly engaged in informal conversations with officers of the New York Federal Reserve Bank, the Federal Reserve Board and the Open Market Committee of the Federal Reserve System.[2] The consistent policy of easing the money markets until the last few months of the year was undoubtedly a consequence of these conversations,[3] although it followed logically from previous policy. The purpose was to promote extensive capital exports and a further redistribution of gold in order to contribute a final measure of stability to the reconstructed gold standard abroad,[4] a purpose which was also supported by credit arrangements consummated with the Banks of Poland and Italy to discount prime commercial bills, if requested, up to $5.25 millions for the former and $15 millions for the latter.[5]

The fact that in achieving the purpose, notable additions were made to member bank reserve balances in spite of gold exports was an important factor in the termination of the promotive policies, particularly in view of the heightened speculative activity and the growth of commercial bank loans on securities.[6] Accordingly, security holdings were gradually liquidated, while higher discount and acceptance rates were initiated. Subsequently, a gradual convergence of American money rates with those obtaining in other international markets took place with no abrupt falling off of foreign loans and gold exports until after the middle of the year. By August the restoration of the gold standard was admitted to be practically completed,[7] and the gold reserve position

[1] Testimony of Adolph C. Miller, Committee on Banking and Currency, House of Representatives, "Stabilization Hearings," H. R. 11806, 70th Congress, 1st Session, p. 217.

[2] *Ibid.*, pp. 216–9.

[3] *Ibid.*, p. 218.

[4] *Ibid.*, pp. 222–3, and Federal Reserve Board, "Annual Report," 1927, pp. 16–7.

[5] Federal Reserve Board, "Annual Report," 1927, pp. 15–6. These arrangements accompanied other credits by a group of foreign, central banks, a stabilization loan of $72 millions floated by Poland on principal money markets and a credit of $50 millions to the Bank of Italy by a group of private banks headed by J. P. Morgan & Co.

[6] *Ibid.*, pp. 11–2.

[7] Editorial, *Federal Reserve Bulletin*, Vol. 14, August, 1928, pp. 541–4.

of foreign central banks sufficiently strong "to permit the normal operations of the gold standard to correct exceptional credit developments in any country that takes an important part in international finance and trade,"[1] a development favorably commented on in the Federal Reserve Board's "Annual Report."[2]

The Test of the Gold Standard

Despite the restraining efforts of the Federal Reserve banks and the higher money rates prevailing, the growth of credit employed in security trading mounted rapidly during the year, and speculative activity proceeded feverishly. The high money rates in the speculative markets tended to induce efforts by member banks to maintain their reserve balances by Reserve Bank borrowing, and even so to apply funds released by the Reserve bank's liberal acceptance purchases at the end of the year.[3] Furthermore, funds were attracted from abroad, causing foreign central banks to dispose of their holdings of dollar exchange as well as to ship gold, and early in 1929 to increase their discount rates, measures which did not altogether meet the situation owing to the continued curtailment of new foreign security flotations in the United States. The difficulty experienced by foreigners in obtaining dollar exchange except at a discount to meet their American obligations was threatening to bring a recurrence of the gold inflow, and to undermine both the Federal Reserve policy and the recently acquired gold position of foreign countries.

Thus, Federal Reserve authorities found themselves in a serious dilemma. Although acceptance buying rates were above market rates after the beginning of the year and purchases of acceptances restricted to short-term maturities, no general change in discount rates was deemed advisable. In fact, it was to avoid a discount rate rise that the warning of February 2, 1929, enlisting the cooperation of member banks in reducing the volume of their security loans, was issued. The admitted reluctance to apply more strenuous measures of control was merely a reflection of the conflicting domestic

[1] *Ibid.*, p. 544.
[2] Federal Reserve Board, "Annual Report," 1928, p. 16.
[3] *Ibid.*, pp. 6–7.

and international considerations,[1] as the following extract from the April, 1929, issue of the *Federal Reserve Bulletin* plainly indicates:[2]

> "The system's desire to see money rates at a lower general level has been due in part to its realization of the bad effects of continued high money rates on domestic business and its unwillingness to draw gold from abroad with consequent advances in money rates in other countries, some of which are suffering from industrial depression. While the system recognizes that one of its most important functions is to protect this country's gold reserves, in existing circumstances these reserves need protection primarily against wasteful absorption into the base of an unduly expanded domestic credit structure rather than against demands from abroad. The objective of Federal Reserve policy, therefore, both from the point of view of domestic business and of world trade conditions, is a readjustment in the credit situation with a view to assuring trade and industry of a continuous supply of bank credit at reasonable rates."

An Evaluation of Federal Reserve Policies

No extensive summary is required to answer further the questions raised at the outset of this chapter. It is patent from evidence collected that Federal Reserve authorities have been profoundly and unavoidably influenced by unusual international factors intimately affecting the domestic business and financial structure. Many circumstances contributed to a confused dislocation of international trade and currencies which were entirely disorganized prior to 1925 and only slowly recovered thereafter.

These factors, resulting from the breakdown of the gold standard during the war, were fundamental causes of the unprecedented gold concentration in the United States. Imminent dangers loomed up for America's whole financial structure, entailing far-reaching industrial and trade repercussions, and threatening not only the capacity of Federal Reserve banks to earn their expenses and to give member banks an extraordinary degree of credit independence, but also the very existence of the nation's gold standard. Moreover, unsettled currencies rendered orderly, organized production almost impossible and affected adversely the international trade of all countries, including that of the United

[1] *Federal Reserve Bulletin*, Vol. 15, April, 1929, pp. 242–4.
[2] *Ibid.*, pp. 243–4.

States. So long as these conditions existed, a contracted purchasing power was destined to prevail in virtually every important world market.

One means of offsetting the contracted purchasing power of foreign countries and avoiding the permanent abandonment of the international gold standard was plainly the export of American capital funds or the injection of American credit and investment resources into international financial markets, supplying foreigners with needed American funds without the necessity of gold shipments. This was the general purpose of the credit policy followed, and the manner of carrying it out was by the active and passive encouragement of easy money conditions in the United States.

Hence, although the conservation of Reserve credit was the keynote of the inclusive credit program set down by the Federal Reserve Board in 1923, when new standards of credit policy were elaborated and the gold reserve ratio relinquished as a credit guide, no steps were taken to reduce the amount of Reserve credit employed. On the contrary, the quantity then outstanding was permitted to become a permanent part of the country's credit base. In 1924, the aggressive credit policies of Reserve banks were for the admitted purpose of stimulating capital exports, and member banks were led by them to use gold imports for increasing reserve balances. While policies at the beginning of 1925 were slightly conservational, the rapid expansion of commercial bank credit in 1925, 1926 and 1927 was not seriously disturbing to Federal Reserve authorities, as is substantiated by the low discount and acceptance rates maintained and the stability of the government security portfolio of the Reserve banks. More direct cooperation with foreign central banks in restoring the gold standard, however, was practiced. The initiative assumed by Federal Reserve banks in easing money conditions in the latter part of 1927 was avowedly aimed at stimulating even greater capital exports, and specifically intended to aid the final reconstruction and retrenchment of the gold standard abroad by causing a redistribution of gold. Operations in 1928 and 1929, while directed at correcting the extraordinary speculative activity which followed the rapid commercial credit growth, were tempered by an evi-

dent desire to avoid straining the gold standard conditions so recently reestablished abroad and averting a complete cessation of capital exports.

Underlying this general program was the basic assumption that if foreign financial maladjustments could be widely eradicated by the restoration of gold as the international monetary standard, a recovery of more orderly world production and trade would result. Debtor-creditor problems between countries under these circumstances would tend to solve themselves. Foreign central banks, moreover, would once more be in a position to assume an effective rôle in the solution of international and domestic credit problems. Finally, the credit expansion within the United States would be curbed and the Reserve banks would regain their continuous contact with the American money market and thus be assured of more effectual control of credit.

General Conclusion

On the basis of the material presented in this and the preceding chapter, a definite conclusion may be reached as to the soundness of the opinion that the post-war expansion of America's international creditor position means the arrival at an advanced industrial stage where rapidly increasing capital exports are presumably normal because of diminishing domestic opportunities for employment. On the contrary, America's capital exports, which enabled the expansion of this creditor status, were mainly the result of a combination of extraordinary domestic and international financial circumstances, including the extremely large foreign demand for American capital and the increase in the supply of that capital resulting from domestic credit expansion in which not only the gold inflow but the Federal Reserve credit program played a prominent part. This does not deny that the country's increasing industrial productivity made material contribution to the country's capacity for foreign investment, but it does invalidate an unnecessarily simplified conception of what actually has happened. Furthermore, it renders all the more serious the problems of America's future international financial relations.

CHAPTER VIII

THE PRESENT STATUS OF THE INTERGOVERNMENTAL DEBTS

A PREVIOUS study by the National Industrial Conference Board, "The Inter-Ally Debts and the United States," was devoted to a thorough consideration of the problem of the intergovernmental debts, particularly the debts owed by former Allied countries to the United States. At the time that study was made these debts were the outstanding feature in America's international creditor position. Radical changes have taken place since, with the rapid mounting of private foreign indebtedness to individual American investors. Payments to the United States in 1928 because of these public debts were only 15% of the total interest and capital repayment receipts on creditor account. They may be an even smaller percentage in the future. Nevertheless, their present worth on a 5% basis was about 33% of the long-term creditor position of the country and 30% of the combined long and short term creditor position in 1928. While these percentages will probably decline with the further expansion of private American investments abroad, for the time being they constitute a substantial share of the nation's international creditor assets.

These intergovernmental obligations have a special interest because of their unique character. They arose in connection with a world-wide conflict and the subsequent period of reconstruction. For the most part they were used to finance military activity with all of its destructive consequences. To a lesser degree they were extended for relief and rehabilitation purposes in the post-war years. Political and ethical questions, as well as those of a purely economic character, confuse any attempt to deal with them. Their importance in the realm of international affairs cannot be too often stressed. For many years they will doubtless remain a central point of international discussion, and a factor influencing political negotiations.

So far as the United States is concerned, the debts, with two exceptions, Russia and Armenia, have been technically settled. Yet they are related to the larger question of intergovernmental indebtedness arising out of the war, many aspects of which are still unsettled. American adjustments agreed to by principal debtors were accepted with an eye to the total situation regarding the latter's other inter-governmental assets and liabilities. Hence, the debts must be studied from that point of view, especially in the light of the fact that international financial experts have proposed final figures for the German reparation debt. Three basic questions are involved first, what is the present statistical relation of the debts owed the United States to the intergovernmental debt problem as a whole both exclusive and inclusive of reparations; second, what is the character and present position of the settlements of the United States Government with debtors; and third, how does a final settlement of the German reparations problem affect, if at all, the composition of these settlements? The possible developments of the future in connection with the war debts cannot be understood without the facts required to answer these questions.

The Intergovernmental Debt Situation as a Whole

Innumerable difficulties confront any attempt to obtain an accurate statement of the real value of all the intergovernmental debts and credits. In the first place, a group of funding agreements has been consummated between a number of the principal debtor governments and the governments of the United States and Great Britain as the principal creditors. But different bases were used in each of these settlements and the amounts of the debts appearing in the national accounts of these two creditors are by no means comparable.

In the published Treasury accounts of the United States Government for example, the debts are entered as the principal amounts borrowed and accrued interest less the principal repaid, no account being taken of future interest payments. On the other hand, in the financial accounts of the British Treasury, debts of foreign governments with which funding

agreements have been reached are included at the total amount of all payments to be received, the debts owed by Empire Governments, and a few smaller debtors, however, remaining at their principal sum less principal repayments. In the accounts of other governments it is frequently impossible to determine upon what basis the obligations have been entered. Often wide discrepancies are evident in the obligations recognized in the official accounts of debtor governments and the amounts entered by the corresponding creditor governments.

The Nominal Position of the Inter-Ally Debts at the Beginning of 1928

Notwithstanding the difficulties mentioned, the nominal or book value of the intergovernmental debts may be profitably surveyed. Adjustments may then be made to bring the available figures into a more comparable form. Necessarily, it is impossible to discuss the intergovernmental debt situation without devoting attention to the present status of reparations obligations imposed upon the Central European countries. For the moment, however, they may be ignored. When the proper adjustments have been made, they may be appropriately introduced.

Preliminary data, consisting of nominal figures for intergovernmental obligations from the latest available official sources, are presented in Table 29.[1] The figures from foreign documents have been converted into dollars from the original quotations in foreign currencies, the rates of conversion being given in footnotes. In gross nominal terms, it is seen, the intergovernmental obligations, as carried in the various governmental accounts, amount to about $24 billions. Although these figures are unreliable because individual statements of debts and credits by various governments are

[1] While these debt figures involve mainly obligations incurred during the war period to facilitate military activity and those incurred in the post-war period for relief and reconstruction purposes, there are some debts included which are not of this character. For instance, the indebtedness of Roumania and Jugoslavia to France includes some advances made in 1926 for the purchase of military supplies. An example of an intergovernmental obligation not included is that of the Argentine to the Spanish Government for $17 millions, incurred in 1927. Another example is that of the Chinese Government debt to Japan. Because of inadequate information the Russian war debt to Japan has also been omitted.

INTER-GOVERNMENTAL DEBTS AT THE BEGINNING OF 1928

(Compiled by the National Industrial Conference Board)

(In millions of dollars)

Principal Debtor Governments	Total Debt	Principal Creditor Governments											
		United States[1]	Great Britain[2]	France[3]	Russia	Italy	Canada[4]	Holland[5]	Jugo-slavia[5]	Switzer-land	Norway[6]	Czecho-slovakia	Sweden[7]
France	7,539	4,025	3,433	..	6[3]	67[3]	..	..	8	..	..	..	..
Great Britain	5,165	4,505	..	260[2]	292[2]	108[2]	..	..	..	..	..	..	..
Russia	4,905	280	4,316	309	..	..	..	..	..	..	..	..	..
Italy	3,377	2,032	1,298	46	..	..	..	..	..	..	..	..	..
British Dominions, other than Canada	601	..	601	..	..	..	..	..	..	..	..	..	1
Belgium	472	414	44	..	..	..	..	..	..	..	..	..	..
Roumania	309	66	164	41	..	14[8]	24	14	..	..	..	..	..
Jugoslavia	297	62	169	66	..	..	..	..	..	..	..	..	..
Poland	278	199	23	43	..	4[9]	..	3	..	..	5	..	1
Czechoslovakia	211	179	4	19	..	9[10]	..	..	..	..	..	..	..
Austria	155	34	65	18	..	18[11]	..	10[11]	..	6[11]	1	3[11]	..
Greece	167	20	113	27[12]	..	..	7	..	..	..	..	..	..
Portugal	115	..	115	..	..	..	..	..	..	..	..	..	..
Armenia	23	17	6	..	..	..	..	..	..	..	..	..	..
Esthonia	20	15	5	..	..	..	..	..	..	..	..	..	..
Belgian Congo	18	..	18	..	..	..	..	..	..	..	..	..	..
Latvia	13	7	6	..	..	..	..	..	..	..	..	..	..
Finland	9	9	..	..	..	..	..	..	..	..	..	..	..
Lithuania	7	6	1	..	..	..	..	..	..	..	..	..	..
Hungary	2	2	..	..	..	..	..	..	..	..	..	..	..
Grand totals	23,683	11,872	10,381	829	298	220	31	27	8	6	6	3	2

[1] United States Treasury, "Annual Report," 1927, p. 628. Figures as of Nov. 15, 1927.

[2] United Kingdom, "Finance Accounts," 1927–8, pp. 91–2. Figures as of March 1, 1928, converted into dollars at parity.

[3] All figures except those lettered from information furnished by the Financial Attache of the French Embassy. They are taken from the French Budget for 1929 and are of January 31, 1928. All conversion at a rate of $.0393. Debts stated in foreign currencies converted at parities.

[4] Information furnished by the Department of Finance, Canada, as of March 31, 1928.

[5] Statement as of Dec. 31, 1927, furnished by the Royal Netherlands Legation, Washington, D. C. Figures are converted into dollars at parity.

[6] Information furnished by the Ministry of Foreign Affairs, Norway, as of Dec., 31, 1927, and converted at parity.

[7] Information furnished by the Riksgaldskontoret, Sweden, as of the end of 1927 and converted at parity.

[8] Roumania, "General State Budget," 1928, p. 33. Debt stated in Italian lire as of January 1, 1928, and converted at new lire parity.

[9] Poland Ministry of Finance, *Statistical Bulletin*, Jan., 1928, figure as of Jan. 31, 1927, and converted at zloty parity.

[10] Information furnished by the Czechoslovakian Legation, Washington, D. C., in lire as of the end of 1927. Conversion at new lire parity.

[11] Austria, "Bundesvoranschlag," Gruppe IV, Staatschuld, 1928, pp. 8–9. Debts as of December 31, 1927, in various currencies. Conversions made at parities save for France, where rate of $.0393 was used.

[12] Net debt as of the end of 1926. Owing to arbitration discussions between the French and Greek Governments with regard to their inter-governmental debts, no figures were available as of the end of 1927. Information furnished by the Financial Attache of the French Embassy from the French Budget for 1928. Francs converted at a rate of $.0395; drachmes converted at $.0126. On the date designated, Greece owed France $32 millions and France owed Greece $5 millions.

not comparable, they, nevertheless, are useful for purposes of contrast. They should be kept in mind, therefore, in taking account of adjusted figures to be subsequently noted.

The Adjusted Position of the Intergovernmental Debts

Certain adjustments may be made which will greatly aid an effort to view the intergovernmental debt situation as a whole. The present worth of certain of the debts covered by formal funding agreements, for example, may be found. That is to say the payments agreed upon under them may be discounted at a given rate of interest and a sum obtained which, if invested at that rate of interest, would yield an adequate return to liquidate the nominal principal amounts due and carry the necessary interest payments. This procedure cannot be followed in every case, however, because only the governments of the United States and Great Britain have consummated funding agreements with their debtors. Even with these creditors some governmental debts are not so covered, namely, those of Armenia and Russia to the United States, and those of Armenia, Russia and the Empire governments to Great Britain. Necessarily, some adjustments must be made more or less arbitrarily because of inadequate information regarding their status. Moreover, some debts must be left unadjusted. In any case, discretion must be exercised. The resulting picture is by no means precise but only approximate. It is presented in Table 30.

Employing a 5% discount rate, on the hypothesis that this is roughly the minimum at which debtor governments could borrow on world financial markets, the present worth of the debts owed the United States Government, the principal creditor, may first be noted. The debt of Armenia has been eliminated because no Armenian government exists at the present time. The sum due from Russia has been arbitrarily reduced two-thirds to obtain a rough approximation to a discounted worth, assuming that a settlement, if reached, will provide merely for the repayment of principal.[1]

[1] Although the present Russian Government has evidenced a disinclination to fund its debts to other governments because they were incurred by the preceding régime, and has pursued an outward policy of repudiation, it is not unlikely that concerted pressure by debtors will shortly result in some kind of settlements. Since the United States Government is committed to a "capacity to pay" policy of

With regard to the French debt, it has been assumed that the funding agreement already drawn up (the Mellon-Berenger agreement of 1926) will be ratified.

TABLE 30: ADJUSTED POSITION OF THE INTER-ALLY AND RELIEF DEBTS AT THE BEGINNING OF 1928

(Compiled by the National Industrial Conference Board)

(In millions of dollars)

Principal Debtor Governments	Total Debt	Principal Creditor Governments				
		United States	Great Britain	France	Italy	Other Creditors
France	3,125	1,897	1,205	..	23	..
Great Britain	3,528	3,494	..	..	34	..
Russia	1,535	93	1,341	101	..	..
Italy	918	489	428	..	..	1
British Dominions, etc.	601	..	601	..	..	..
Belgium	272	214	44	..	..	14
Roumania	149	34	36	41	14	24
Jugoslavia	111	18	35	58	..	..
Poland	229	150	23	43	4	9
Czechoslovakia	116	84	4	19	9	..
Austria	47	9	16	7	8	7
Greece	87	17	36	27	..	7
Portugal	36	..	36	..	..	..
Other Debtors	60	30	30	..	..	..
Grand totals	10,814	6,529	3,835	296	92	62

In the case of the obligations owed the British Government, their discounted value has been similarly determined on the basis of the funding agreements with France,[1] Italy, Roumania, Portugal, Jugoslavia and Greece. The debt of Armenia has been disregarded. Great Britain's official debt to Russia has been deducted from that of Russia to Great Britain and an arbitrary estimate of the present worth of the remaining debt has been made on the assumption that any settlement arranged will provide for payments making the discounted value correspond roughly with those of other principal debtors.[2] Thus, a two-thirds reduction was

adjustment, any funding agreement with the Russian Government would probably be made on this principle. It may be fairly assumed that terms would provide merely for the repayment of principal.

[1] Although the agreement with France remains unratified.

[2] In 1924, the MacDonald (Labor) government reached a vague agreement with the Russian Soviet Government providing for the subsequent arbitation of respective obligations in return for additional British credits. The overthrow of the Labor Party's government prevented submission of the treaty to Parliament and the arrangement was allowed to lapse by the succeeding Baldwin (Conservative) Government. See G. H. Moulton and Leo Pasvolsky, "World War Debt Settlements," New York, 1926, pp. 64–6 and 419–27.

assigned to it. Since the Austrian funding arrangement with the United States was contingent upon a similar arrangement with other creditors of the Austrian Government including Great Britain, the Austrian debt to the latter has been adjusted on a comparable basis. The remaining obligations, those owed by Empire Governments and those owed by less important debtors, have been included as the principal sums carried in the British financial accounts, since no substantial scaling down has occurred with regard to them.[1]

Adjustments for the debts owed the French and Italian Governments present difficult problems. The Russian obligations again have been arbitrarily reduced by two-thirds and those of Austria have been treated similarly to those owed the United States and Great Britain. The British obligation to Italy has been discounted according to the British-Italian funding agreement.[2] On the other hand, the British debt to France has been cancelled against an equivalent non-interest-bearing debt of France to Great Britain, secured by gold.[3] The French-Italian debts to each other have been offset and the net debt of Italy to France included. No other readjustments were made for either France or Italy.

Only the Austrian obligations to other creditors were reduced in any way, and they were revised as previously described. The resulting table should be taken with some reserve, but the view to be gained is more nearly correct than any other. The adjusted net debtor-creditor position of the various governments appears in Table 31. The total adjusted intergovernmental indebtedness is seen to be $10.8 billions, and the net figure $6.9 billions, representing notable reductions from the totals in Table 29.

Germany's Reparation Debt

To complete the outlines of the present intergovernmental debt situation, the reparations debts must be considered finally. In fact, the reparations obligations have come to be regarded by the chief governmental debtors of the United States as the major link between intergovernmental war

[1] United Kingdom, "Finance Accounts," 1927–8, pp. 24 and 91. [2] *Idem.*

[3] Parliamentary Papers, "French War Debt," 1926, Cmd. 2692, and United Kingdom, "Finance Accounts," 1927–8, p. 81.

debts. A final fixation of reparation, therefore, has more than a passing significance.

TABLE 31: ADJUSTED NET POSITION OF DEBTORS AND CREDITORS AT THE BEGINNING OF 1928

(In millions of dollars)

Debtors		Creditors	
France	2,829	United States	6,529
Russia	1,535	Great Britain	307
Italy	826	Others	62
British Dominions	601		6,898
Belgium	272		
Roumania	149		
Jugoslavia	111		
Poland	229		
Czechoslovakia	116		
Austria	47		
Greece	87		
Portugal	36		
Others	60		
	6,898		

Those familiar with the history of the reparations problem will recall that under the London Agreement of 1921, the German reparations obligations were fixed at a capital sum amounting to about $32 billions, covered by A bonds to the amount of $3 billions, B bonds to $9 billions and C bonds to $20 billions.[1] This total formally remains the sum owed by Germany. To carry this obligation at a 6% interest and sinking fund charge would require a payment of $1.9 billions each year. To carry even the same charge upon only the A and B bonds of the London agreement would necessitate payments amounting annually to $720 millions. But the payments deemed practicable and provided for under the Dawes plan in the standard year totaled only $596 millions, with additions possible under the operation of a prosperity index, and this included service upon the $228 million German External Loan of 1924.[2] Obviously, to meet the sum originally determined upon under the Dawes plan, Germany would have to make perpetual payments and go further and further into debt.

On June 4, 1929, the International Commission of Finan-

[1] Carrying a 5% interest and 1% sinking fund charge. The issue of C bonds, however, was contingent upon Germany's ability to meet the A and B bonds. See Carl Bergmann, "The History of the Reparations," New York, 1927, p. 75.

[2] According to the terms of the Dawes plan, it was necessary for Germany to obtain a loan yielding $190 millions. As the bonds had to be floated at a discount and the issue had to yield this amount, it was necessary to make the face value of the loan materially higher or about $228 millions. *Ibid.*, pp. 280–1.

cial Experts dealing with the problem of Germany's reparations liability, almost four months after its first assembly, announced that an agreement had been reached upon a schedule of payments proposed by Mr. Owen D. Young, marking a substantial scaling down, on the whole, of the standard annuity payments, for which Germany was obliged indefinitely under the Dawes Plan, and of the creditors claims originally presented by them to the Commission. According to this schedule, if approved by the governments concerned, Germany will become directly liable for a series of thirty-seven annuities commencing September 1, 1929, rising from $407 millions in 1930 to $579 millions which have a present value of $8,369 millions on a 5% basis, Moreover, Germany will become contingently liable for twenty-two additional annuities averaging $405 millions for all save the final payment and having a discounted value at the same interest of $901 millions. This contingent liability, however, will depend upon the extent to which the last annuities may be cared for by a special sinking fund from the allocation of a share of the profits of the "Bank of International Settlements," an institution created by the plan to handle the general problems of reparations payments and transfers.[1] Lastly, Germany will become liable for an additional annuity of about $13 millions for thirty-seven

[1] This bank will have an initial capital of $100 millions and will act as an international clearing and settlement bank as well as a reparations bank. Deposits will arise in connection with all of these operations and will be of both a demand and time character with the latter interest-bearing and profit-sharing. During the first 37 years, Germany will carry a special non-interest-bearing deposit equal to 50 per cent of the average amount remaining in the reparations annuity trust account, but not exceeding $24 millions. In addition, France will carry a time deposit as long as required to an amount equal to one unconditional annuity allowed her, or $119 millions, which will be interest-bearing. This deposit will serve as a guarantee fund available for the use of other creditors in case of the postponement of any conditional annuities, although repayment must be provided for by the assignment of an equivalent amount of the annuity transfer which has been postponed. See Annex I and VIII of the Experts' "Report."

Of the profits, the first five per cent goes to a legal reserve fund until that fund reaches 10 per cent of the paid in capital. Then six per cent is to be paid on the capital shares outstanding and further payments up to 12 per cent as dividends. One-half of the remaining profits will go into the general reserve fund until it equals the paid-in capital; 40 per cent until it reaches twice the paid-in capital; 30 per cent until it reaches three times the paid-in capital; 20 per cent until it reaches four times the paid-in capital; 10 per cent until it reaches five times the paid-in capital; and five per cent thereafter. Of the remainder, 75 per cent goes to the depositors, and 25 per cent may be applied to a reserve fund to meet the last 22 annuities due from Germany, provided Germany elects to make a long-time deposit of $95 millions. See especially Annex I, Section 11, of the Experts' "Report," as printed in the *New York Times*, June 9, 1929.

years to care for the service of the External Loan of 1924 and having a present value at 5% of $254 millions. Thus, Germany's final reparations obligations, assuming the acceptance of the plan by creditor governments, becomes the total of the sums mentioned, or $9,524 millions.

A new plan for the distribution of the reparations annuities is also offered in the Experts' Report and constitutes an important departure from the distribution applied in the first four years of the Dawes plan on the basis of the Spa Protocol of 1921 and the Paris Agreement of 1925. Under these previous arrangements, charges for army costs, the Dawes Loan of 1924, restitution allowances and the Belgian pre-armistice debt came first; then a small allowance of 2¼% of the balance was assigned to the United States to cover Mixed Claims, and finally, the remainder was distributed as follows: 54.5% to France, 23% to Great Britain 10% to Italy, 4.5% to Belgium and 8% to other creditors. Contrast this with the new scheme of providing a definite distribution of each annuity. The best comparison can be gained from Table 32 which contains the discounted values of each of these individual share schedules, and their relative importance in the total discounted reparations debt of Germany as of September 1, 1929.

The entire debtor position of the German Government is not wholly settled by the new plan, however. Belgian claims against Germany for marks introduced within her borders during the war remain unadjusted, although negotiations leading to this end are to be carried on between the two governments concerned. If Belgium's claims should be acceded to by Germany, an additional debt (as of 1929) of $104 millions at 5% would be involved.[1] Again, Germany has claims against successor states to the Austro-Hungarian Empire and Poland for German state property of which they became the possessors through the alteration of frontiers by the Treaty of Versailles.[2] It is recommended, however, that

[1] The discounted value of approximately $6 millions for 37 years, the annuity asked by Belgium. See *New York Times*, June 1, 1929.

[2] In the final discussions of the Experts' Commission regarding the Young annuities, Germany proposed as a condition to her acceptance of them that the payment of these claims should be credited against the last twenty-one annuities. See especially the *Commercial and Financial Chronicle*, Vol. 128, May 18, 1929, p. 3238.

these claims be settled within a year after the new plan becomes effective.[1]

TABLE 32: THE DISTRIBUTION OF GERMANY'S REPARATIONS DEBT COMMENCING SEPTEMBER 1, 1929, AS PROPOSED UNDER THE YOUNG PLAN

(Computed by the National Industrial Conference Board)[1]

Capitalized at 5%

(In millions of dollars)

Debtor		*Creditors*		
Germany, Scheduled annuities 37 years	8,623	France	(52.3%)	4,846
" Contingent liability for last 22 annuities	901	British Empire	(20.4%)	1,897
		Italy	(11.8%)	1,095
		Belgium	(5.6%)	515
		Roumania	(1.2%)	108
		Jugoslavia	(3.9%)	366
Total Liability	9,524	Greece	(0.4%)	35
Less Service on German External Loan of 1924	254	Portugal	(0.6%)	60
		Japan	(0.6%)	53
		Poland	(0.0%)[2]	2
		United States	(3.2%)	293
Total	9,270			9,270

[1] Based upon Part VIII and Annex VII of the Experts' "Report."

[2] Less than 0.1 of one per cent.

Reparations Owed by Others

Before examining the reparation obligations of Germany in relation to the other intergovernmental debts growing out of the world war, the reparations obligations of Austria, Bulgaria and Hungary must be considered. Austria's obligations may be omitted, since a fixation of her reparations burden has been postponed until 1942. Bulgarian reparations, however, were set down in the Treaty of Neuilly, 1919, at 2,250 million gold francs or $434 millions. The schedule of payments provided for was revised by the Inter-Allied Commission in 1923, dividing the debt into two parts, Part A, $106 millions, payable in sixty years and carrying 5%, and Part B, $328 millions, due in 1953 and non-interest bearing.[2] Discounting at 5% the schedule arranged for Part A and the sum of $328 millions due in 1953, a present value of $227 millions is obtained as of the beginning of 1928, to

[1] See Part IX of the Experts' "Report" previously cited.

[2] See the League of Nations, "Memorandum on Public Finance, 1922–1926," Geneva, 1927, pp. 125–6, for the schedules of Bulgaria's reparations debt.

which should be added $3 millions to cover the cost of military occupation after hostilities.

A schedule of reparations payments for Hungary was established by the Reparations Commission in 1924.[1] On the basis of it, the present worth of the remaining payments on a 5% discount basis is $24 millions. Taking the reparations liabilities of Bulgaria and Hungary together and distributing them among creditor governments, Table 33 is obtained, approximately as of the beginning of 1928.

TABLE 33: ESTIMATED REPARATIONS DEBT OF BULGARIA AND HUNGARY AT THE BEGINNING OF 1928[1]

(Computed by the National Industrial Conference Board)

Capitalized at 5%

(In millions of dollars, as of 1927–8)

Debtors		*Creditors*	
Bulgaria—reparations and cost of occupation	230	France—reparations and costs of military occupation	66
Hungary—reparations	24	Italy—ditto	64
Austria—fixation of reparations obligation postponed	..	Great Britain—ditto	29
		Belgium—reparations	10
		Others—reparations	85
	254		254

[1] The distribution of the Bulgarian and Hungarian reparations has been made on the basis of the percentages estimated by Moulton and Pasvolsky, *op. cit.*, pp. 73–4; France, 26%; Italy, 25%; Roumania, 15%; Great Britain, 11%; Serbia, 10%; Belgium, 4%; and others 9%. The costs of military occupation were distributed in accordance with the Sofia Protocol of March 28, 1924; Great Britain, 44%; France, 20%; and Italy, 36%.

The Interrelationship of All the Debts

A final step in the analysis should be a statistical view of the interrelationship of all the debts. Such a view, however, cannot be obtained with completeness, because the new plan and distribution of Germany's reparations debt commences September 1, 1929, (and runs in succeeding years for fiscal periods from April 1 to March 31), while available figures for other governmental debts are obtainable from official sources only as of the beginning of 1928. Nevertheless, adjusting Germany's debt roughly back to April 1, 1928 on the

[1] The decision of the Reparations Commission on Hungarian reparations and the schedule (February 21, 1924) are quoted in full, Moulton and Pasvolsky, *op. cit.*, pp. 210–7.

basis of the Dawes Plan annuities and their distribution,[1] the picture included in Table 34 is obtained, Table 35 shows how completely the final settlement of Germany's reparations problem will effect a balancing of the reparations war debts of former allied governments, France, Great Britain (including the Empire), Italy and Belgium, contrasted with Table 31, all becoming creditors.

TABLE 34: ADJUSTED POSITION OF THE INTER-ALLY, RELIEF AND REPARATIONS DEBTS AT THE BEGINNING OF 1928

(Compiled by the National Industrial Conference Board)

(In millions of dollars)

Principal Debtor Governments	Principal Creditor Governments						
	Total Debts	United States	Great Britain	France	Italy	Belgium	Others Creditors
France	3,125	1,897	1,205	..	23	..	..
Great Britain	3,528	3,494	..	..	34	..	..
Russia	1,535	93	1,341	101	..	..	..
Italy	918	489	428	..	..	..	1
British Empire	601	..	601	..	..	..	..
Belgium	272	214	44	..	..	..	14
Other Debtors	835	342	216	195	35	..	47
Total Inter-Ally and Relief	10,814	6,529	3,835	296	92	..	62
Germany Reparation Debt[1]	9,557	311	1,969[2]	5,004	1,118	530	625
Bulgaria Reparation Debt and Occupation Cost	230	..	26	60	58	9	77
Hungary Reparation Debt	24	..	3	6	6	1	8
Grand Total	20,625	6,840	5,833	5,366	1,274	540	772

[1] Administrative costs and German External Loan of 1924 excluded in making adjustments.

[2] Including British Empire.

Obviously, the new annuities proposed for Germany were agreed upon with full recognition of the policies of the governments concerned regarding the interconnection of all the debts and the domestic fiscal problems of various reparations creditors. Great Britain's position was defined by the Balfour note of August 1, 1922, which stated that the British

[1] Although the new plan provides that reparations from April 1 to September 1, 1929 shall be based primarily upon "outpayments" by Germany's creditors, while the distribution of the remainder is left for subsequent settlement by the governments concerned. See Part VIII of the Experts' "Report."

TABLE 35: ADJUSTED NET POSITION OF DEBTORS AND CREDITORS INCLUDING REPARATIONS AT THE BEGINNING OF 1928

(In millions of dollars)

Debtors		*Creditors*	
Germany (Net debt)	$9,557	United States	$6,840
Russia	1,535	France	2,241
Bulgaria	230	Great Britain[1]	1,704
Hungary	24	Italy	356
Others	63	Belgium	268
	$11,409		$11,409

[1] Including British Empire.

Government did not "propose to ask more from debtors than is necessary to pay our creditors."[1] France took the view, often repeated in statements from French officialdom, that reparations receipts by her should be sufficient to enable her to pay the debts owed her creditors plus an allowance for the cost of reconstruction.[2] Furthermore, Italy stood upon a similar principle,[3] and Belgium contended the right to her share under the Dawes annuities for reimbursement of payments she must make to the United States and to recompense her for the German marks introduced into Belgium by Germany during the War.[4] Moreover, the period of the annui-

[1] Addressed to Italy, Jugoslavia, Roumania, Portugal and Greece, Moulton and Pasvolsky, *op. cit.*, p. 417 and pp. 413–8, where the Balfour note is quoted in full. Adherence to the Balfour principle was reaffirmed by Mr. Winston Churchill, Chancellor of the British Exchequer, in a speech at Chungford, England, October 23, 1928. See an editorial, "A New Phase of the Reparations Controversy," *Commercial and Financial Chronicle*, Vol. 127, November 3, 1928, pp. 2421–2. It was also reaffirmed in recent budget debates in Parliament, *New York Times* dispatches of April 16–8, 1929.

[2] For example, this principle was developed by Premier Raymond Poincaré in a speech in Chambery, France, September 23, 1928, and restated again in a speech in Caen, October 23, 1928, and a speech at Bar-le-Duc, April 22, 1929. See the above cited editorial in the *Commercial and Financial Chronicle;* also pp. 2413–4; and Vol. 128, April 27, 1929, p. 2700. At the Geneva meeting, September 16, 1928, Mr. Briand is said to have stated that Germany must agree to pay France enough to balance French payments to the United States and a certain additional sum to cover the costs of reconstruction. Moreover, he insisted upon payments continuing as long as payments to debtors had to be made. Cited by the *Commercial and Financial Chronicle*, Vol. 127, September 22, 1928, p. 1566.

[3] *Commercial and Financial Chronicle*, Vol. 127, October 27, 1928, p. 2273. See also a speech on "Italy's Foreign Relations" delivered by the Hon. Benito Mussolini before the Italian Senate on June 5, 1928, cited in full in the Italy American Society *Bulletin and Italiana*, Vol. 2, July, 1928, pp. 129–55, especially p. 149.

[4] See the editorial, "A New Phase of the Reparations Controversy," *op. cit.*, p. 2322, and press reports of the meetings of the experts' commission. Only an agreement by Belgium and Germany to negotiate separately upon the issue of marks introduced during the war enabled acceptance of final report by Belgian experts. *New York Times* dispatch, June 4, 1929.

ties in the new schedule itself was made to correspond approximately to the period of debt payments to the United States Government. Finally, a separate memorandum was prepared by experts of reparations creditors and Germany, agreeing that, in case of any future modification of "out-payments" by these creditors on war debt account, there would be a subsequent modification of the German annuities.[1] There can be little question that the principal European debtor governments have been faced in recent years with pressing fiscal problems, and that without a reparations adjustment of the character proposed, they would be confronted with new difficulties in the future. Especially, the problems arising from payments in connection with other war debt contracts might become more severe and the chances of their final execution more remote.

The Debts Owing to the United States Government

It is not necessary to review in detail the origin of the war and post-war debts owing the United States Government by foreign governments, but in general their inception may be recalled.[2] For the most part, they included advances of the American Treasury to foreign governments under the authority of the Liberty Loan Acts for the purpose of aiding directly in the prosecution of the war.[3] Regarding them Mr. Albert Rathbone, Assistant Secretary of the Treasury in charge of foreign loans, 1918–1920, wrote:

> "The purpose of our loans to the Allies was to win the war. They were made without stint but without waste. We supplied to each country availing of our loans all the dollars each required in excess of its own dollar resources available for purchases in the United States. The dollars we loaned, used in this country by the Allied Governments, were expended for purposes approved by our own governmental agencies. We did not make loans for purposes which in our judgment were unnecessary and not calculated to help win the war. We kept the amount of our loans down by requiring the countries borrowing of us to use to the extent available their other dollar resources for purposes which we approved. In conjunction with Great Britain we furnished the finance required to effect necessary war purchases of

[1] *New York Times*, June 9, 1929, a memorandum made public with the Experts' "Report," but not a part of it.

[2] National Industrial Conference Board, *op. cit.*, pp. 35–65.

[3] World War Foreign Debt Commission, *op. cit.*, p. 312.

other Allied Governments in neutral markets. Upon final adjustment we held the promissory notes of each Allied Government to which we have made loans, in an amount corresponding with the assistance we had furnished it."[1]

In addition to war loans proper, amounting to $9,598 millions, further credits to foreign governments were extended in the following ways[2]: (1) $599 millions to finance the sale of surplus war supplies by the War and Navy Departments to foreign governments and (2) $141 millions for the purpose of affording relief to suffering European populations through credits of the American Relief Administration and the United States Grain Corporation.

The Present Status of the Governmental Debts to the United States Government

A summary view of the present status of the governmental debts owed the United States Government may be obtained from accompanying statistical tables. Such a view is especially desirable before considering the character of the settlements which have been made and the policy pursued by the United States Government with regard to them. Accordingly, these tables should be given close study.

Table 36 presents the nominal position of the debts at the time funding agreements were arranged or on November 15, 1928 if unfunded. At this latter date, Greece and Austria had agreed to funding terms although the agreements have not been ratified by Congress. Only the obligations of Armenia and Russia, therefore, remain unprovided for by a formal understanding, and Armenia has no government at the present time. In Table 37 is contained a statement of the status of the debts under funding arrangements, and showing the nominal position of the funded indebtedness on November 15, 1928. The average interest rates on the debts as funded, with the exception of the Greek and Austrian obligations, are also included in this table. Lastly, Table 38

[1] Albert Rathbone, "Making War Loans to the Allies," *Foreign Affairs*, Vol. 3, April, 1925, p. 398.

[2] Pertinent citations from the Acts of Congress authorizing these credits may be found in the World War Foreign Debt Commission, *op. cit.*, pp. 312–3.

Table 36: The Nominal Position of the Governmental Debts Owing to the United States Government at the Time of Funding or on November 15, 1928, if Unfunded

(Source: U. S. Treasury)

(In thousands of dollars)[1]

Country	Total Principal Amount of Debts		For Relief Credits and Purchases from U. S. Grain Corp.	Payments[2] on Principal of Original Obligations	Net Principal[3] at Time of Funding or on Nov. 15, 1928, if Unfunded	Accrued and Unpaid Interest at Funding or on Nov. 15, 1928, if Unfunded[3]	Total Principal and Interest at Funding or on Nov. 15, 1928, if Unfunded
	Under Liberty Bond Acts	For Purchase of Surplus War Supplies					
Great Britain	4,277,000	..	..	202,182	4,074,818	525,181	4,579,999
France	2,997,478	407,341	..	74,333	3,330,485	684,484	4,014,969
Italy	1,648,034	..	..	364	1,647,670	394,131	2,041,801
Belgium	349,214	29,873	..	2,058	377,030	40,750	417,780
Russia	187,370	406	4,465	..	192,601[5]	96,462	298,063
Poland	..	83,683	75,984	..	159,667	18,893	178,560
Czechoslovakia	61,974	20,604	9,301	..	91,880	23,120	115,000
Jugoslavia	26,780	24,978	..	721	51,038	11,812	62,840
Roumania	25,000	12,923	..	1,799	36,124	8,462	44,586
Austria	..	..	24,056	..	24,056[6]	11,547	35,603
Greece	15,000	..	12,167[4]	..	15,000[6]	5,250	20,250
Esthonia	..	12,213	1,786	..	13,999	1,764	15,763
Armenia	..	..	11,960	..	11,960[5]	5,265	17,225
Finland	..	..	8,282	..	8,282	718	8,300
Latvia	..	2,522	2,610	..	5,132	643	5,775
Lithuania	..	4,159	822	..	4,982	1,048	6,030
Hungary	..	..	1,686	..	1,686	253	1,939
Nicaragua	..	432	..	141	291[5]	11	302
Cuba	10,000	..	..	10,000	..	..	..
Liberia	26	..	..	26	..	..	..
Totals	9,598,237	599,134	153,120	291,623	10,046,700	1,829,794	11,864,725

[1] Sum of columns and totals do not always check owing to the omission of thousands.

[2] U. S. Treasury, "Annual Report," 1927, p.629.

[3] *Idem.*, also 1928, p. 560; and World War Foreign Debt Commission, *op. cit.*, p. 443.

[4] The recent funding agreement arranged with Greece provides for an additional credit of $12,167,000 which should be included here. See footnote 7 of Table 37.

[5] Unfunded debts.

[6] Funding agreements negotiated 1928.

TABLE 37: THE NOMINAL POSITION OF GOVERNMENTAL DEBTS OWING UNITED STATES GOVERNMENT COVERED BY FUNDING AGREEMENTS, AS OF THE DATE OF FUNDING AND NOVEMBER 15, 1928

(Source: U. S. Treasury)[1]

(In thousands of dollars)

Country	Date of Funding Agreement	Funded Debt	Payments on Account of Principal	Net Indebtedness (Nov. 15, 1928)	Unpaid Interest	Total (Nominal) Indebtedness (Nov. 15, 1928)	Average Interest Rates on Debt as Funded %[2]
Great Britain	June 19, 1923	4,600,000	120,000	4,480,000	..	4,480,000	3.3
France	Apr. 29, 1926	4,025,000	92,500[3]	3,932,500	..	3,932,500	1.6
Italy	Nov. 14, 1925	2,042,000	15,000	2,027,000	..	2,027,000	.4
Belgium	Aug. 18, 1925	417,780	6,650	411,130	..	411,130	1.8
Poland	Nov. 14, 1924	178,560	..	178,560	25,812[5]	204,372	3.3
Czechoslovakia	Oct. 13, 1925	185,071[4]	9,000	176,071	..	176,071	3.3
Jugoslavia	May 3, 1926	62,850	600	62,250	..	62,450	1.0
Roumania	Dec. 4, 1925	66,561[4]	900	65,661	..	65,661	3.3
Austria	Dec. 7, 1928[6]	35,603	..	35,603	..	35,603	..
Greece	Jan. 18, 1928	18,125	..	30,292[7]	..	30,292[8]	..
Esthonia	Oct. 28, 1925	13,380	..	13,830	2,102[5]	15,932	3.3
Finland	May 1, 1923	9,000	236	8,764	..	8,814	3.3
Latvia	Sept. 24, 1925	5,775	..	5,775	850[5]	6,625	3.3
Lithuania	Sept. 22, 1924	6,030	126	5,904	314[8]	6,218	3.3
Hungary	Apr. 25, 1924	1,939	40	1,899	43[8]	1,942	3.3
Totals		11,668,124	245,052	11,435,239	29,121	11,464,360	..

[1] United States Treasury, "Annual Report," 1928, p. 560.

[2] For the whole period of payments. These percentages are from the World War Debt Commission, *op. cit.*, p. 443.

[3] Payments have been made by France equivalent to amounts due under funding agreement. It is understood these payments will be applied to schedule upon ratification, U. S. Treasury, *op. cit.*, p. 52.

[4] Difference between principal of funded debt and amount here stated represents deferred principal payments provided by the funding agreements.

[5] Accrued and unpaid interest due to exercise of options given in funding agreements.

[6] The agreement with Austria was negotiated in April, 1928, but was contingent upon acceptance of similar agreements by Austria's other creditors. The date here given is that of the presentation of the agreement before the Ways and Means Committee of the House of Representatives.

[7] The Greek funding agreement provides for an additional loan of $12,167,000 for 20 years at 4%. This sum has been added to the nominal principal due to obtain the net indebtedness. Committee on Ways and Means, House of Representatives. "Report on the Settlement of Indebtedness of the Hellenic Republic," Report No. 953, 70th Congress, 1st Session.

[8] Settled by the delivery of bonds through the exercise of option to pay one-half of interest due under funding schedule in bonds.

Table 38: The Discounted Values of the Governmental Debts Owing the United States Government Related to Their Nominal Values

(Computed by the National Industrial Conference Board on the basis of various funding agreements)
(In thousands of dollars)

Country	Total (Nominal Funded Indebtedness) (Nov. 15, 1928)	Total Remaining Payments Scheduled under Funding Agreements	Present Value of Scheduled Payments at 4% as of 1929	Present Value of Scheduled Payments at 5% as of 1929	Present Value at 4% as a Per Cent of Nominal Debt	Present Value at 5% as a Per Cent of Nominal Debt
	I	II	III	IV	V[1]	VI[2]
Great Britain	4,480,000	10,117,365	4,132,128	3,499,234	92.2	78.1
France	3,932,500	6,662,674	2,392,748	1,958,151	60.8	49.8
Italy	2,027,000	2,331,836	656,670	509,246	32.4	25.1
Belgium	411,130	707,107	265,952	220,639	64.7	53.7
Poland	204,372[3]	455,238[4]	183,517[4]	155,287[4]	89.8	76.0
Czechoslovakia	179,071	300,929	104,490	85,170	58.4	47.6
Roumania	62,450	119,760	42,964	35,125	68.8	56.2
Jugoslavia	65,661	92,288	24,958	18,913	38.0	28.8
Greece	30,292[5]	38,100	19,298	16,982	63.7	56.1
Austria	35,603	24,615	11,229	9,519	31.5	26.7
Esthonia	15,932[3]	35,179[4]	14,291[4]	12,100[4]	89.7	75.9
Finland	8,814	19,808	7,981	6,838	90.5	77.6
Latvia	6,625[3]	15,718[4]	5,948[4]	5,038[4]	89.8	76.0
Lithuania	6,218[3]	13,413[4]	5,487[4]	4,585[4]	88.2	73.7
Hungary	1,942[3]	4,408[4]	1,790[4]	1,544[4]	92.2	79.5
Totals	11,467,610	20,938,438	7,869,451	6,538,371	68.6	57.0

[1] Column III as a per cent of column I.
[2] Column IV as a per cent of column I.
[3] Including deferred payments from the exercise of options.
[4] Adjusted to allow for deferred payments from the exercise of options.
[5] See footnote 7 to Table 37.

shows the present worth of the debts, discounted to 1928 at both 4% and 5% interest rates, related to their nominal values. The totals of remaining payments scheduled under the funding agreements is a further feature of Table 38.

American Policy towards the Status of the War Debts

The combined sums of the original cash advances of the United States Government amounted to $10,338 millions distributed among twenty different countries, of which sixteen were European. Under all the provisions of the Congressional Acts enabling these advances, definite recognition was given of their contractual character. They were advances made in consideration of the receipt of promises to repay in the future. This contractual character, moreover, was definitely recognized by governments receiving them through their acceptance under the terms laid down in the original acts.

In the early correspondence regarding the debts after the war and the proposals suggested at that time for a general and simultaneous settlement of all war obligations along "broad lines," the Treasury set forth the administration viewpoint that the obligations of the various Allied governments held by the United States were to be severally and not jointly regarded, that is, that they represented the debt of each to the United States.[1] When a general cancellation of all intergovernmental war debts was proposed by Great Britain early in 1920, Secretary of the Treasury David F. Houston replied that there was neither present advantage nor necessity of cancellation. Moreover, he doubted if the formal proposal would be favorably regarded by the American Government.[2] Later discussions confirmed the general policy previously suggested, especially a letter by President Wilson to Mr. Lloyd George in August, 1920.[3] Furthermore, it was definitely indicated in a communication to the French Ministry of Finance, a month earlier, that the obligation of debtor countries to liquidate war debts was a matter entirely independent of the reparations problem.[4]

[1] World War Foreign Debt Commission, *op. cit.*, pp. 64–8 in which this correspondence is quoted. (Report for the Fiscal Year 1926.)
[2] *Ibid.*, p. 68–70. [3] *Ibid.*, pp. 73–4. [4] *Ibid.*, pp. 71–2.

In these early conversations American debt policy became effectively crystallized. It was further confirmed by the creation of a World War Debt Funding Commission by the Act of February 9, 1922, in the funding settlements negotiated by it, and still later by the replies of the Secretary of the Treasury to statements from the Princeton and Columbia University faculties in favor of cancellation.[1]

American Debt Funding Policy

It was shortly apparent in the early post-war years that the notes held against borrowing countries would have to be readjusted in order to provide for their ultimate liquidation. Two principal steps were taken to bring about this end; first, the establishment of a World War Foreign Debt Commission, just mentioned, and second, a decision reached early in 1925 that "it was contrary to the best interests of the United States to permit foreign governments which refused to adjust or make a reasonable effort to adjust their debts to the United States to finance any portion of their requirements in this country."[2] States, municipalities and private enterprises were included in the prohibition.

In the original act establishing the World War Foreign Debt Commission, it was laid down that no power was granted to extend the time of maturity beyond 1947 or to fix an interest rate lower than 4¼%.[3] It was subsequently found, however, that settlements within these limits were not possible. The Commission, in the words of its Chairman, Secretary of the Treasury Andrew W. Mellon, was forced to consider that:[4]

> "No nation, except by the pressure of public opinion and the necessities of its own credit, can be compelled to pay a debt to another

[1] See Secretary Mellon's reply to these statements, *ibid.*, pp. 306–11.

[2] *Ibid.*, pp. 38–9. This policy was in pursuance of a broader policy laid down early in 1922 through press statement of the State Department requesting bankers to advise it in advance of loan undertakings to foreign governments in order that opportunity might be given for objection to be voiced in case national interests should be involved.

[3] For the original Act (Public No. 139, 67th Congress) see *ibid.*, pp. 6 or 88.

[4] Statement by Secretary Mellon before the Ways and Means Committee concerning the settlements of indebtedness of Belgium, Czechoslovakia, Estonia, Italy, Latvia and Roumania, *ibid.*, p. 292.

nation. An insistence on a funding agreement in excess of the capacity of the nation to pay would justify it in refusing to make any settlement. None can do the impossible. If the debtor is to be able to pay and if the creditor is to receive anything, a settlement fair to both countries is essential. It follows that those who insist upon impossible terms are in the final analysis working for the entire repudiation of the debts. The only other alternative is that the United States goes to war to collect."

Accordingly, the Commission endeavored to arrive at the most satisfactory arrangements that could be made, animated by the conviction that a first essential to permanent European recovery was the removal of "the debt question as a source of international friction."[1] But even more important, was the feeling that the several debtor nations should preserve "the sanctity of their respective obligations."[2] The policy followed by the Commission is well described in its "Annual Report for the Fiscal Year 1926":[3]

"The policy pursued was to treat each debtor nation on the basis of its particular capacity to pay the debt. The first element was time. It would have been preferable, of course, to have the matter out of the way within a generation, but to insist upon such a period, brief as nations go, would have been out of the question. This very extension of time has been criticized as not an indulgence but a hardship to the debtor nation. No one likes to pay a creditor over a 62-year period. But if the whole debt can not be paid on demand, no other course was open except to extend the period of repayment. This was done in the first settlement, that with England, and similar extensions have been granted to all other nations. The second problem was the amount to be paid in the earlier years. It is these years that are the most difficult, because post-war readjustments are still incomplete, and it is here that America has been most lenient. No debtor nation will deny that the payments provided for these earlier years are well within its capacity. The third question was the later years. No one can insure the future but given normal conditions, it is believed a true balance has been held between the duty of the debt commission to the American taxpayer, and fairness toward those nations to which was extended aid during and after the war. The debts have not been cancelled, but the impossible has not been demanded. Since these settlements, England's excepted, have but recently been completed, the American debt has meant practically nothing to continental Europe in the eight years since the armistice, and it can not become

[1] *Ibid.*, p. 37 (Report for the Fiscal Year 1925).
[2] *Idem.* *Ibid.*, pp. 59–60.

too heavy a load in the next few years. Thereafter much depends upon the progress of the world. With peace and the development of trade internally these settlements are quite workable. The principal fact is that settlements have been made and a fair trial can be had, not in theory but in practice. The debtor nations know what should be provided in their budgets and uncertainty is eliminated."

Regarding the policy of refusing foreign governments, which had not made a reasonable effort to adjust their debts to the United States, permission to finance any portion of their requirements in this country the Commission further stated:[1]

"While the United States was loath to exert pressure by this means on any foreign government to settle its indebtedness, and while the country has every desire to see its surplus resources at work in the economic reconstruction and development of countries abroad, national interest demands that our resources be not permitted to flow into countries which do not honor their obligations to the United States and through the United States to its citizens."

The Character of the Funding Agreements

Statistical information on the status of the debts at funding and of the unfunded debts of Armenia and Russia has already been presented in Table 36 and their position since funding has been included in Table 37. Finally, the present worth of the payments due is compared with the nominal position of the obligations in Table 38. As a further step in revealing the character of the funding settlements, Table 39 shows the average payments to be received from foreign government debtors for five-year periods from 1930 to 1984. For convenience all debtors of less than $100 millions have been grouped in a single class. It remains to illuminate this information with a brief explanation.

The general principle followed in the settlements was that debtors should repay the principal but that a modification of interest rates should be made with regard to capacity to pay. Obviously, it was of little material consequence whether this was done or an outright cancellation of part of the principal owed was allowed with interest rates maintained. On the basis of a comparison of the discounted worth of the payments to be received with the nominal

[1] World War Foreign Debt Commission, *op. cit.*, p. 39.

principal due at the beginning of 1929, there is seen to be in effect a 31.4% cancellation of all debts on a 4% discount rate and a 43% cancellation on a 5% rate.

The British funding agreement, coming first, set the model upon which other settlements were drawn up. But not all of them conformed exactly to the pattern. Rates of interest naturally varied through the application of the above principle. Moreover, in other settlements the character of the schedules and the degrees of graduation varied considerably from the British. Finally, in the Austrian and Greek agreements most recently negotiated, no attempt was made to segregate principal repayments from interest charges. Rather, a lump sum was agreed upon and distributed over a period of years.

For the present purposes, it is possible to ignore formal funding differences in interest rates and take account merely of the schedule of payments.[1] The agreements with Great Britain, Finland, Hungary, Poland, Esthonia, Latvia and Lithuania, all generally conforming, provide for virtually uniform payments during the first ten years and somewhat larger, but more or less uniform, payments during the remaining years. Poland, Esthonia and Latvia, however, have the option during the first five years, which they have exercised to date, of meeting three-quarters of the payments due in bonds bearing interest until 1932 at 3% and thereafter at 3½%.

The agreements with Czechoslovakia and Roumania constitute another class. Special concessions were made to these countries in the way of deferring a certain portion of the payments during the first eighteen years for the former and eleven years for the latter. For these preliminary periods, Czechoslovakian payments are uniform and Roumanian slightly graduated. In later years practical uniformity obtains for both.

Yet a third group includes the agreements of Belgium, France, Italy and Jugoslavia. Save in the case of Italy, whose schedule is graduated for the entire period, uniformity obtains after a period of graduation, ten years in the case

[1] In this connection, see also Moulton and Pasvolsky, *op. cit.*, pp. 27–9, 42–4, 51–3, 81–5 and 101–3.

Table 39: Average Annual Payments to be Made to the United States Treasury by Debtor Governments in Each Five-Year Period, 1930 to 1984

(In millions of dollars)

Period	Total[1]	Great Britain	France	Italy	Belgium	Poland[2]	Czecho-slovakia	Others[3]
Average, 1930–1934	255,717	169,700	52,000	12,838	7,790	6,563	3,000	3,826
" 1935–1939	323,254	182,315	97,000	16,526	12,077	7,012	3,000	5,324
" 1940–1944	356,033	183,395	122,000	21,207	12,695	6,954	3,577	6,205
" 1945–1949	363,287	181,720	125,000	24,512	12,700	6,981	5,882	6,492
" 1950–1954	369,132	181,413	125,000	31,234	12,675	7,086	5,881	5,843
" 1955–1959	373,518	180,191	125,000	36,209	12,726	7,177	5,884	6,331
" 1960–1964	380,838	179,777	125,000	43,165	12,695	7,169	5,882	7,150
" 1965–1969	388,712	181,920	125,000	48,851	12,706	7,074	5,881	7,280
" 1970–1974	399,235	185,289	125,000	56,877	12,696	6,951	5,883	6,539
" 1975–1979	406,706	185,587	125,000	63,782	12,794	7,123	5,881	6,539
" 1980–1984	417,881	184,892	125,000	74,387	12,821	8,359	5,881	6,541

[1] These average payments do not include additions arising from exercise of options by various countries provided in funding agreements.

[2] Does not include additional payments from Poland arising from exercise of the funding agreement option. These payments would increase average annual receipts in the first five years indicated about $790 thousands, in the next series of periods until 1979, from $820 to $840 thousands and in the last period $960 thousand.

[3] Does not include additional payments from Esthonia, Hungary, Latvia and Lithuania arising from the exercise of the funding agreement options. These payments would increase average annual receipts approximately $86 thousands in the first period and $96 thousands thereafter.

of Belgium, sixteen years for France and thirty-five years for Jugoslavia.

A final class includes Austria and Greece. Although the United States agreed in 1922 to postpone consideration of Austria's debt until 1943, contingent upon similar action by other creditors, recently Austria has taken steps to arrange a settlement of all debts.[1] Her proposed settlement provides for two schedules, one to be applicable from 1943 on, taking the form of twenty uniform payments, and an optional schedule amounting to the discounted worth of the first at 5% running in graduated steps from 1929 to 1968. The optional schedule, it is understood, will be taken advantage of by Austria. The Greek settlement, on the other hand, has scheduled for the old debt graduated payments from 1928 to 1938 and uniform payments thereafter until 1970 for the remainder.[2] The new loan of $12.2 millions carries interest at 4% and provision for a sinking fund to retire it in thirty years, in other words, a series of uniform payments.

A Reparations Settlement and the Debts Owing the United States Government

Current discussion of the intergovernmental debt situation has entered upon the relationship of the final settlement of Germany's reparations liabilities to governmental debts owing the United States. Principal debtor governments which are reparations creditors have officially regarded the interdependence of all debts arising out of the war as a practical reality. In view of the declared attitudes of these governments, therefore, it is only natural that one of the most notable phases of the recent report of the "Young Com-

[1] Under this agreement the United States has agreed to accept $33,428,500 to be paid in 25 equal installments dating from January 1, 1929 or $24,614,885 slightly more than the principal sum due excluding accrued and unpaid interest, under the optional schedule. Since it is authoritatively reported that Austria will take advantage of the option, a direct scaling down of her debt is involved. Testimony of Mr. Ogden L. Mills, Undersecretary of the Treasury, Committee on Ways and Means, House of Representatives, "Austrian Debt Settlement Hearings," H. J. Res. 340, 70th Congress, 2nd Session, p. 3.

[2] The total amount Greece will pay exclusive of the new loan is $2,207,923 in excess of the principal sum as funded, $18,125,000. Thus the annual interest charge Greece will pay over 62 years will be $35,612. Committee on Ways and Means, "Report of the Settlement of Indebtedness of the Hellenic Republic," *op. cit.*

mittee" should have been the implicit recognition by experts representing the creditor governments of this interdependence and the desirability of providing once and for all a workable plan for the liquidation of all the war debts. Such a recognition was clearly reflected in the three principal proposals which were made and the suggestions for their execution: first, annuities by Germany for a period of fifty-nine years or so long as creditors remained obligated to each other and to the United States on war and relief debt account; second, an "International Bank of Settlements" for handling the annuity payments, their distribution and transfer; and, third, the commercialization and mobilization of the funds available from the annuities by means of bond issues.[1]

In other words, it would appear from the period of annuities and their amounts, that Germany is regarded by her principal creditors as a source of funds which they must pay to each other and to the United States, to liquidate intergovernmental debts and that, moreover, governmental debt payments to various creditors and to the United States by reparations creditors may be transferred by drafts upon balances held with the "Bank of International Settlements" as a result of reparations payments, facilitated by the international exchange operations which the latter may carry on. Finally, it would appear that through the commercialization and mobilization of the reparations annuities a substantial volume of funds might be acquired which reparations creditors might use to reduce internal indebtedness or remaining intergovernmental indebtedness among themselves, or which they might offer to the United States Government in liquidation of a number of annuities due it under separate funding agreements.

American Debt Policy and Germany's Reparations Debt

The preceding review of American debt in the past has shown that each obligation owed the United States Government has been viewed as an independent problem, severally

[1] Commercialization and mobilization applies to the floating of a bond issue secured by the unconditional portion of the reparations annuities amounting to $157 millions a year, about $13 millions of which is assigned to service on the External Loan of 1924. Presumably, bond issues so secured would be floated upon world financial markets. See Annex III to the Experts' "Report" previously cited.

contracted and severally adjusted. Moreover, at no time has America officially recognized any relationship between the various debts due and the reparations liabilities of Germany or other Central European powers, the presence of American experts upon the Commissions of 1924 and 1929, dealing with the reparations problem being entirely unofficial. Wherefrom the funds may come for payment of debts owing the United States Government, therefore, is a matter wholly the concern of individual debtors.

Recent expressions of a semi-official and official character by the American Administration have further confirmed the continuance of debt policy as it has been followed in the past. For example, on October 2, 1928, President Coolidge in an informal and unofficial discussion of the situation with press representatives let it be "definitely and finally understood" that the American Administration was opposed to the theory "that the billions of dollars in war debts owing the United States by Europe and the billions owed by Germany were inseparable, and that the latter could not be revised downward without a reduction of the former."[1] In his opinion, the settlement of the war debt question was a closed incident[2] from the standpoint of the United States. This expression, however, was published several months prior to the first meeting of the reparations experts held on February 11, 1929.

More recently, about a month prior to the completion of the experts' work, press reports suggested the opposition of the present American Administration to official or semi-official American participation in the proposed "Bank of International Settlements," the reparations problem and its settlement being looked upon as a purely European affair.[3] Supporting this position and referring specifically to the suggestion of such American representation on the directorate of the new bank, Secretary of State Henry L. Stimson issued the following statement on May 16, 1929, that:[4]

> "While we look with interest and sympathy upon the efforts of the committee of experts to suggest a solution and a settlement of the

[1] See an editorial, "American Policy Again Declared," in which press reports are quoted, *Commercial and Financial Chronicle*, Vol. 127, October 6, 1928, pp. 1856–7.
[2] *Idem.*
[3] *New York Times* dispatch, May 14, 1929.
[4] *Ibid.*, May 16, 1929.

vexing question of German reparations, this Government does not desire to have any American official, directly or indirectly participate in the collection of German reparations through the agency of this bank or otherwise. Ever since the close of the war the American Government has consistently taken this position; it has never accepted membership on the Reparations Commission; it declined to join the Allied Powers in the confiscation of sequestered German property and the application of that property to its war claims.

"The comparatively small sums which it receives under the Dawes Plan are applied solely to the settlement of the claims judicially ascertained by the Mixed Claims Commission (the United States and Germany) in fulfillment of an agreement with Germany, and to the repayment of the expenses of the American Army of Occupation in Coblentz, which remained in such occupation on the request of both the Allied nations and Germany.

"It does not now wish to take any step which would indicate a reversal of that attitude, and for that reason will not permit any officials of the Federal Reserve System either to serve themselves or to select American representatives as members of the proposed international bank."

Contrasting the views of principal reparations creditors as officially stated and reflected in the new reparations plan with those of the United States as exemplified in the foregoing expressions and previous policy, it is obvious that a profound chasm exists between the attitude of the United States Government and her debtors concerning the interconnection of all the debts incident to the war. To pass judgment upon the propriety of such attitudes would be plainly to engage in controversy over the most difficult and complex questions. They are important here because they may reappear in the event of any further attempt to deal with the entire problem through a commercialization of the unconditional reparations debt of Germany.

The Problem of the Commercialization of the Reparations Debt

The question logically arises whether or not a commercialization of part of Germany's reparations debt could be used to bridge the gulf resulting from differing attitudes and policies towards the interrelation of the whole war debt problem. That is to say, could any of the funds received from a commercialization of the German debt be offered to the United

States in liquidation of a series of annuities due by any debtor under its funding agreement?

Under the newly proposed plan, an unconditional annuity of $157 millions a year for 59 years is available for commercialization purposes. Of this annuity, $119 millions has been allotted to France. A further sum of $12.8 millions is assigned for service upon the German External Loan of 1924, leaving an annuity of $25.2 millions available to other creditors. At 5%, the present worth of the unconditional share available to France totals $2,361 millions and $2,036 millions at 6%, while the discounted value of the share available for others amounts to $501 millions and $432 millions respectively. Successive reparations security offerings to the combined amounts at either interest rate, depending upon market requirements, might be possible ultimately. Is it not reasonable to expect that a share of the sums received from such issues might be offered to the United States Government in liquidation of debts owed by Germany's creditors?

It does not necessarily follow, of course, that reparations creditors receiving funds from such a program would offer any of them to the United States Government in partial settlement of their individual debts. Such funds might be applied as well to the retirement of domestic government indebtedness. There are, nevertheless, political considerations which might induce reparations creditors to approach the United States Government looking towards the application of funds received from a reparation bond sale on their various debts. This would be done severally, if done at all. There would result no formal linking of the various debts. That debtors had obtained the funds from a reparation bond sale would become an irrelevant question. That they were in independent positions to make cash settlements would be the consideration to be taken into account. Nothing in American debt policy would seem to exclude the possibility of accomplishing some adjustment for cash if requests were actually received.

One new problem in particular would have to be faced. For the most part, concessions in the American debt settlements were made on the interest side, with the principal amounts due remaining intact. But as has been pointed out,

in practical fact there was also a scaling down of principal. Each settlement carried provisions for commercialization at the request of the American Treasury and no amount approaching the nominal principal due could be secured through a public marketing of the bonds held. Rather, the sums which could be so obtained would approach the discounted values of the total payments scheduled under the funding agreements. Only this amount could be amortized by scheduled payments at interest rates likely to be demanded by the bond-buying public.

Would the United States Government be willing to accept the cash value of ten or twenty-five of the payments scheduled under any funding agreement in lieu of waiting for the actual payments agreed upon to be met? This question must inevitably be answered in case cash offers are received, but how it will be answered must await the actual commercialization of Germany's reparations debt and the definite occasion of offers for the prompt liquidation of independent debts owing the United States Government by foreign governments.

Summary

Although the present chapter has appeared as a digression from the preceding development, its place in the entire treatment should be clear. The governmental obligations owing the United States Government remain a substantial proportion of the entire foreign credits of the country, and payments on capital account flowing into the country in each future year will be partly the result of their existence. Because they are related, directly or indirectly, to the larger aspects of the intergovernmental debt problem, any adjustment of other phases of this larger problem must necessarily have a bearing upon their position. In fact, proposals having an indirect relationship to their position have been incorporated in the report of the "Young Committee" concerned with reparations. While it is too early to judge the situation finally, present plans indicate that the commercialization of a substantial part of Germany's reparations debt will occur in the future, a portion perhaps upon American markets.

Subsequently, and directly or indirectly as a result of this commercialization, principal government debtors may approach the American Government for a cash settlement of a number of their scheduled annuities.

Would the flotation of German reparations bonds in any amount upon America's security markets be disturbing to American finance and consequently to American commerce and industry? Would the acceptance of cash offers for the liquidation of debt annuities due the United States by individual governments be so disturbing? Although these questions are merely two of a number which have to do with America's future international financial relations, they have a special significance, both because of the unique character of the intergovernmental debts themselves and because the international financial operations involved would be concentrated in a relatively short period. It has seemed sufficient here to call attention to these problems, but in Chapter X, there will be occasion to consider in more detail just how a reparations commercialization operation on the world's financial markets might be consummated and just what the effects of a transfer of funds received by Germany's creditors from such a bond issue into or out of the United States might be.

NOTE: Since the official text of the International Financial Commission's Report and figures for intergovernmental debts as of the current year are not available for consideration in this study, the foregoing discussion is necessarily limited and tentative.

CHAPTER IX

THE ECONOMIC CONSEQUENCES OF INTERNATIONAL CAPITAL MOVEMENTS

The Problem

AS HAS been indicated in preceding chapters, the expansion of America's international creditor and debtor position in recent years was largely the consequence of an extraordinary set of circumstances. In some measure, it was the result of the maintenance of a gold standard by the United States while former gold standard countries were experiencing monetary difficulties. It was also the result of unusual demands upon American capital markets while these other countries endeavored to restore gold standard conditions. Finally, it was the result of a number of fundamental changes in the country's domestic financial structure and industrial conditions, causing expanding bank credit to concentrate in security markets.

Taking the situation as a whole, there has been little direct relationship between the movement of goods and services and the coincidental flows of capital funds and capital service payments. While outflowing investment capital funds were only partially counterbalanced by similar inflowing funds, they were even more than offset in many years by the net movement of capital service payments of all sorts. Furthermore, the net movement was modified or enlarged by net payments on short-term capital account. When excess inflows of all payments on capital account occurred, the fact that service imports were so large (and also gold in several years) enabled the movement to take place and a continued net export balance of merchandise to be maintained.

The fact that there was little apparent relationship between the movement of goods and services and capital in the past several years does not imply that no connection at all existed between them. A very real relationship plainly did obtain,

even though it was extremely indirect, but the fact that unstable monetary conditions prevailed abroad and that numerous modifications of the gold standard were instituted in the course of its restoration renders the tracing of any very close affinity in many cases almost impossible. In short, the movements of goods and services and capital payments, inclusively defined, were the result of innumerable independent transactions of individuals, corporations and governments and were not immediately or directly reciprocal.

The reality of this remote connection, however, can be readily understood after the following discussion, which is primarily concerned with the effects of future movements of capital funds under the reconstructed gold standard. In a sense, therefore, the treatment of the present chapter serves a dual rôle. It partially explains the nature of the relationship of goods and services and capital funds in the past few years, while its principal concern is with the future. In fact, its entire justification rests with the necessity of arriving at some working basis for judging the wider effects of any further movement of capital funds in and out of the country.

It is obvious that no intelligent grasp of the economic consequences of the country's future international financial relations is possible without a set of fairly definite hypotheses regarding the interconnection of various classes of international dealings. Such a set of working principles, moreover, is not only requisite to the present study, but also to a second study planned by the National Industrial Conference Board which will consider statistically and analytically present tendencies in American foreign trade as affected by international movements of capital and capital service payments. Necessarily, the treatment here must be wholly tentative and largely speculative, yet it must have a basis in past experience and current facts. Revision will naturally be required as new information becomes available.

To consider such a relationship even theoretically raises other questions regarding the probable nature of America's international financial dealings in the future. To be sure, America has expanded its international assets relative to liabilities in recent years because of the operation of unusual influences, but will this process be continued? Will the

volume of American foreign investments continue to expand each year or will it undergo a contraction? What of the volume of funds flowing into the country for foreign investment in American enterprise, the repayment of principal, and the payment of interest and dividends on previous American investment? What of the movement of payments on short-term capital account? Finally, while the aggregate movement is important from the standpoint of affecting conditions in the United States, what will be the nature of the payments on capital account between the United States and Europe, Canada, South America, and the Orient; and what may be the impact upon countries in these areas and hence upon trade?

These questions may be deferred until the succeeding chapter. Judging from the experience of the United States in the past few years, there may be either a net inflow or a net outflow or an approximate balance of all payments on capital account. Moreover, any one of these situations may be more or less permanent. In advance of more definite conclusions, this discussion proceeds upon the assumption of a net outflow of payments on capital account and later the situation in case of the appearance of a net inflow of such payments will be considered. First, however, the relationship which a particular foreign loan floated in the United States may have to American exports of merchandise or gold will be treated. After all, if the United States experiences a net outflow of all payments on capital account in the future, it will be largely the result of a large number of individual foreign loans or security offerings, though partially the consequence of capital service payments upon foreign investments here.

A Single Foreign Loan and American Exports

To simplify, consider first a simple transaction in which a loan is made in the United States to a foreign corporation or governmental unit. Securities are floated for the loan in the American investment market. A shift in the ownership of capital funds or purchasing power follows. Under the present system of credit-currency, bank deposits formerly

owned by the individuals or corporate institutions buying the securities are transferred to the credit of the borrower. But the borrower wants the funds in his own country. In the case of a corporation the funds are wanted, it may be supposed, for new plant extensions or old plant reconstruction and modernization, for working capital rehabilitation or for a more general financial reorganization. A governmental unit, on the other hand, would want funds for public works, refunding past debts approaching maturity at home, or the funding of a floating debt which has become excessive. As in the case of any borrower, a single loan may be sought to cover a combination of requirements. Once a loan is obtained, the problem is one of transfer. How this may be accomplished merits brief attention.

Direct Expenditure of Foreign Loans for American Goods and Services

Although it is here assumed that ordinarily the borrower wants the funds for use in his own country, the proceeds of any loan may be expended to a greater or lesser extent for materials and services in the United States. When they are, obviously, merchandise and services constitute the media of transfer. In a very real sense, some percentage of every loan is so transferred, inasmuch as the underwriting commissions of bankers, a service export, ranging, it has been estimated, from 2% to 8% of the nominal loan,[1] are a first charge upon loan proceeds. But in addition, other portions of the borrowed funds may be transferred directly.

For example, if the capital funds were borrowed by a relatively undeveloped country to exploit its resources or to construct public works, the borrowing country might find it convenient to purchase machinery, tools, other materials and technical skill in the United States. It would do this if its own manufacturing facilities were not adapted to the production of the capital goods required, and past trade relations with American exporters had been so developed as to establish an evident preference for American goods of the character

[1] U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, Finance and Investment Division, "Foreign Security Offerings," 1920–1925, *Special Circular*, Nos. 234, 239–41, 260–61.

needed. It would also do it if American goods and services compared favorably in price and quality with those of competing countries. Finally, it would do this if geographic proximity caused transportation charges to be an important factor in their cost. To sum up, some part of a foreign loan floated in the United States would tend to be expended for American goods if it were obtained for developmental purposes and if America possessed any advantage, economic or traditional, as a supplier of the type of goods needed. In such an instance, as has been emphasized, the merchandise and services exported would immediately constitute the economic media of transfer.

Furthermore, funds loaned to foreigners might result in direct exports of American goods and services in cases where the loan contract should specify the expenditure of a portion or all of the borrowed sum in the United States.[1] Such a specification might, of course, be either formal or in the nature of an informal understanding. While sometimes thought of as being a common practice, it is difficult to verify how general "tying in" or "earmarking" clauses are. One investigator asserts that he could find no clear-cut example, not only in recent publicly offered foreign loans arranged on the American market but also in past public foreign offerings on other markets.[2] Certainly formal loan "earmarking" is not common. No investigation, however, could bring to light informal understandings, nor could the facts of loans privately granted be adequately surveyed. Nevertheless, this much can be said: only a weak borrower would accede to any condition limiting his capacity to use borrowed funds to the greatest economic advantage. As a debtor, in other words, he has a vested interest in obtaining the greatest buying power possible from the proceeds of his loan. Moreover, it is to the investor's interest also to have the greatest economic use made of the funds which he has advanced.

An External Loan and the Foreign Exchange Market

If no reasons existed for the expenditure of the remainder

[1] For example, when a foreign loan is for a public work or improvement, bankers arranging the loan might insist upon American engineering supervision and materials to insure the proper expenditure of the loan proceeds.

[2] A. P. Winston, "Does Trade Follow the Dollar," *American Economic Review*, Vol. XVII, Sept., 1927, pp. 458–77, especially footnote 23, p. 477.

of the foreign loan after caring for the underwriting commissions of bankers, and the funds are desired for use in the borrower's own country or a third country, the problem of transfer would assume a less direct relationship with exports of goods and services.[1] The borrower would be concerned with nothing more difficult than money changing. To translate his recently acquired dollar balances into the currency of his own country, he could proceed in either of two ways: First, have his agent in America go into the exchange market and buy up his own currency in the form of bills of exchange and post the same to him or buy gold; second, he could go into his own domestic foreign exchange market and sell dollars to those having remittances to make to the United States. The entire transfer need not be made at once, but only as occasion demanded, the remaining funds being invested in short-term securities.

If the borrower's agent bought bills for him in New York, their sources would be the variety of international transactions which would appear on the credit or export side of the international accounts of America with his country. They would include exports of goods of all kinds, exports of outstanding securities, incoming payments for interest, profits, commissions and bond redemptions, incoming payments for freight, tourist and miscellaneous services, and finally incoming payments on short-term capital account. If the borrower sold dollar exchange in his own market, the demand for dollars would arise from these same sources, looked at, however, from the debit or import side of his country's balance of accounts with the United States.

The net result of the loan transfer process here considered, other things remaining constant, would be for the borrower's currency to become more expensive in American markets because of the increased demand, and simultaneously for the dollar to become cheaper in his own exchange market because of the increased supply. If such a shift occurred, although the variation could not be great under gold standard conditions, and the prices or rates of other currencies in other exchange markets had not moved in the same direc-

[1] If the borrower wanted to transfer the funds to some other market for expenditure, essentially the same process would be involved.

tion, the loaned funds could be converted into them, and then into the borrower's own currency. Thus a triangular exchange mechanism might be employed to facilitate the transfer.

But other things never remain constant in the exchange market. The effect of the borrower's demand in New York, if sufficiently large and persistent, might be a slight expansion of the offering of the borrower's currency, as banks or others possessing a supply would be stimulated to sell by increased demand reflected in a higher exchange rate. Furthermore, those who could delay remitting would tend to withhold their demands. The reverse would tend to occur in the borrower's exchange market, as others who had dollars to sell would be inclined to withdraw them temporarily from the market to await a higher rate, while those who had obligations to meet would be induced to take advantage of prevailing rates. In this way the transfer of funds might be accomplished at very little exchange cost to the borrower.

The reason for this is not far to seek. There is always on the exchange market a latent reserve supply of, or demand for, foreign exchanges. The latent supply will tend to be drawn on the market when an exchange rate rises and withheld when it falls. The reaction of the latent demand will be just the reverse. The existence of these market reserves is due to the necessity for banks to have exchange reserves and to the multiplicity of exchange movements both ways. An extension of credit, moreover, ordinarily precedes the drawing of exchange bills or the transmitting of remittances, and there is regularly at any time, as a consequence, a large supply or demand just off the market which may be called in or may be withheld, as a particular exchange rate is high or low. Still further possibilities exist for increasing the supply of foreign currency from bank credit sources, but they can be better discussed at a later stage.

Summary

The principal point to be stressed before proceeding with further analysis is the great difficulty encountered in attempting to tie up directly the flow of loaned funds and the flow of goods in a single loan transaction. Judging from

the entire balance of international payments statements in 1926, 1927 and 1928, a borrower going into the New York exchange market to transfer his borrowings into his own currency could have obtained a supply from a great variety of sources.[1] In general, looking at the balance of accounts as a whole they would have been found roughly as follows:[2]

Major Sources of Foreign Exchange Supply	Percentage Distribution		
	1926	1927	1928
Merchandise and gold exported	58.9	59.8	56.0
Securities and other claims on wealth exported	17.9	21.0	26.8
Interest receipts on former loans	8.4	8.8	8.3
Government debt receipts	2.2	2.3	2.0
Service exports	8.0	8.1	6.9
Unfunded credits and net unaccounted-for	4.6	..	..
Total	100.0	100.0	100.0

Naturally, these sources would vary from day to day and from month to month during the year. Furthermore, the relative sources for particular currencies would differ.[3] The data available, however, are insufficient to show them save in an aggregate way.

A Net Outflow of Capital Funds and American Foreign Trade

The transfer of the proceeds of a particular loan, it is clear, is ordinarily a financial process having little causal relation with the export of goods and services, even though it may

[1] See Appendix A of this volume.

[2] See Table 17 of this volume, and compare with the relative distribution in other years.

[3] An attempt was made by Ray O. Hall, of the Department of Commerce, to draw up an estimated American-British balance of payments for 1927. Although some financial items are omitted, i. e. movements of outstanding securities and short-term credits, the distribution of the figures which are given is as follows:

	Percentage Distribution
Merchandise and gold exported	76.0
Interest receipts	3.4
Government debt receipts	15.3
Service receipts	5.3
	100.0

If figures were complete, the relative source of British exchange currency from financial transactions would be larger, but the major source would still have been from merchandise exports. In the case of other European countries, the proportions would be very different. See Ray O. Hall, "Estimated American-British Balance of Payments in 1927," *Commerce Reports*, June 18, 1929, pp. 710–12.

be made possible because of it. When sufficient foreign loans are being floated simultaneously to lead to a net outflow of all payments on capital account, the causal relation with goods and service exports may likewise be distant. Nevertheless, a definite, though indirect, connection may be established. It is this connection which is the basis for the companion study on America's foreign trade and markets.

In the past seven years, it was noted in Chapter IV, the flotation of many foreign loans upon the American market did not result in an outflow of goods necessarily because of them, although they did play a part in obviating the need of merchandise imports from foreigners to enable the latter to meet the service charges on their accumulated debts. Owing to the counter-flow of capital funds and other payments on capital account, in other words the transfer of foreign loan proceeds was in the main a financial process, with a less intimate relationship with American exports of goods than has been commonly supposed. Any hypothesis, therefore, that in the immediate or approaching period the United States will experience a persistent net outflow of capital funds to foreign areas may be altogether erroneous. Yet it is altogether possible that this will occur. If it does, far-reaching consequences may be felt by the business community. It is justifiable, consequently, to trace tentatively a probable sequence of events which might be involved, employing to that end the accumulated knowledge available.

Although a portion of every loan may be regarded as transferred in banker's services, and a part of others may be expended directly for American goods, undoubtedly the majority of foreign loan proceeds are wanted immediately for expenditure in the borrower's home market or in a third market. Essentially, what is involved is a transfer of purchasing power or money changing. The problem created by a persistent net outflow of capital funds is one of discovering in what ways an additional foreign currency can be made available to meet the requirements of the capital migration.

A Net Outflow of Capital Funds and the Foreign Exchange Market

Observe the effects in the foreign exchange markets when

the net outflow of capital funds first makes itself felt. The situation may be described briefly. Borrowers, having secured their loans, would individually come into the exchange markets to acquire their domestic currencies. The increased demand for their currencies in the United States or the increased supply of dollars in their own markets would be a persisting influence and would tend to exhaust after a short time all of the available foreign currency supplies. Exchange rates on the borrowing countries would tend to rise.[1] Exchange rates on non-borrowing countries would rise also owing to triangular conversions, but their movement would tend to lag slightly behind those of the borrowing countries, depending upon their importance as bases for triangular or multangular exchange transactions.

This tendency of foreign exchange rates to rise from the pressure of migrating capital funds might eventually lead to a flow of gold. At least, when exchange rates would touch the gold points, gold shipments would become profitable and would tend to take place. Before this occurred, however, bank credit might be extensively employed to effect a money transfer of the capital owing to the international operations of large private banks and central banks. This possibility has been referred to already but analysis was reserved for this juncture.

Bank Credit and the Transfer Process

As market reserves of foreign currencies concerned would become depleted and exchange rates would rise, American international bankers, so long as they judged the exchange market movement to be more or less temporary and so long as other conditions, such as interest rates, were favorable, would draw finance bills upon their foreign correspondents to restore their balances abroad and to meet continuing foreign currency demands. Foreign international banks, moreover,

[1] It might be inferred that a rise in exchange rates would itself tend to stimulate American exports and retard imports by making the former cheaper to foreigners and the latter more expensive to Americans and that this would provide an additional supply of foreign currency. However, since the movement of exchange rates on a gold basis is relatively minor, profits to importers and exporters are little affected by their movement, scarcely enough to induce a greater or smaller flow of merchandise.

if they possessed unemployed funds, might exchange local deposits for American balances. Thus, American short-term borrowing of foreign bank credit through the operations of international banks, might offset for a time the outward movement of capital funds. From their very nature, limits to these operations might shortly appear, depending upon many other factors. When such limits would be reached, commitments involved would require movements of gold; or the rise of exchange rates to the gold points, because of the discontinuance of the banking operations, would again make gold shipments profitable, and their appearance probable.

There remains the further and far more important possibility that the central bank of the borrower's nation would be willing to take over the loan proceeds in exchange for local purchasing power.[1] It would do this in some cases as a matter of policy, in order to avoid a possible alteration of the exchange market position unfavorable to its nationals, or because of some international agreement with the central banks of other countries.[2] Moreover, it would do this also if there appeared a likelihood of immediate transfer causing an inflow of gold and such an inflow was regarded as undesirable from the standpoint of the nation's credit structure or the international credit situation by the central bank authorities. Finally, in some instances, the central bank might be willing to take over the loaned funds because they

[1] In this connection, note the foreign exchange holdings of various central banks, statements for which may be found in any current issue of the *Federal Reserve Bulletin*. The Bank of France was able to acquire large balances of foreign exchange when the French stabilization program became more or less apparent and French funds, accumulated abroad, returned home. As recently as September 21, 1928, Bank of France credits in the American market were estimated at $800 millions in a *New York Times* dispatch. They were probably but slightly less at the end of the year.

Dr. Hjalmar Schacht, president of the German Reichsbank, in his recent book, "The Stabilization of the Mark," New York, 1927, p. 266, states that the conversion of foreign loans into marks at the Reichsbank is by far the more frequent disposition of such loans by German borrowers. However, in the last part of 1927, the Reichsbank refused to buy loan proceeds, a policy which was thereafter maintained except when desirable to replenish foreign exchange reserves. See "Report of the Agent General for Reparations Payments," November 30, 1926, pp. 49 and 60; December 10, 1927, pp. 95 and 106–7; June 7, 1928, p. 80, and December 22, 1928, p. 108. The same facts may also be found in the "Reports" of the Commissioner of the Reichsbank for the same dates.

[2] Possibly in the future because of an agreement arranged through the newly proposed "Bank of International Settlements" recommended by the recent Commission of Experts to deal with the German reparations problem.

could be included as part of the legal currency reserves,[1] or because it was deemed a wise policy to build up secondary reserves of foreign exchange,[2] or because foreign earning assets were preferred to domestic gold holdings. Eventually, of course, the central bank could withdraw these balances in the form of gold, but in the meanwhile they would technically constitute an international liability or short-term indebtedness of America. The money transfer of the loaned funds, nevertheless, would be complete because of them.[3]

How long this process could continue would depend a great deal upon central banking policy, not only of a particular bank's policy but of broader policies formed in cooperation with other central banks, as well as on the condition of its legal reserves at the particular time.[4] Foreign exchange reserves could only be accumulated with full regard for domestic reserve requirements. When these reserves would demand expansion, only an actual gold movement would suffice.[5] Such gold movements, however, would take place at the time when needed and not necessarily only when exchange rates were at the favorable gold points. In short, American balances of foreign central banks would be augmented only so long as existing domestic gold stores were adequate for credit expansion or so long as credit policy would admit of its feasibility.

[1] See the list of the legal reserve requirement of foreign central banks, Appendix B of this volume. See also C. H. Kisch and W. A. Elkin, "Central Banks," London, 1928, Appendix 1, pp. 155 ff., in which a summary of the laws, charters and statutes regulating central banks is given, and the discussion of foreign exchange reserves, pp. 90–3.

[2] Central bank holdings in the United States for reserve purposes would be partially with the Federal Reserve banks. They would appear either as deposits or as contingent liabilities on account of investments in bankers acceptances for foreign account. Owing to confidence in America's gold standard position, however, they might be almost entirely held with larger commercial banks.

[3] There is a tendency at the present time among leading foreign central banks, as with the Federal Reserve banks, to hold a higher reserve ratio than is dictated by law, as for example the Bank of France, the German Reichsbank, the Bank of Italy, the Bank of the Netherlands, the Bank of Belgium, Swiss National Bank, the Central Bank of Chile and others. See below Table 46, and Appendix B of this volume. In such cases the reserve ratio is policy determined rather than law determined.

[4] See Feliks Mlynarski, "Gold and Central Banks," New York, 1929, in this connection, Chap. V, "The Gold Exchange Standard," pp. 71 ff., but especially pp. 74–81.

[5] The gold would not need to be shipped at once from the United States, but could be held with a Federal Reserve bank on earmarked account.

The International Credit Consequences of the Capital Flow

Whether gold shipments were involved or whether the transfer of the funds making up the persisting capital flow were made possible by the employment of bank credit, the significant consequence would be virtually immediate changes in the volume of credit purchasing power in the borrowing country relative to the American volume. Furthermore, since banking reserves would be affected, these relative changes in the volume of purchasing power might be many times the actual net movement of capital funds. Central banks acting individually or in cooperation might endeavor to exert a determining or guiding influence upon the course of developments, in line with some conception of national or international credit control, and beyond question would profoundly affect the emerging situation. Notwithstanding, the principal impact of the financial situation described would be along such lines.

The key to the subsequent analysis, therefore, is found in the comparative changes in the volume of credit purchasing power in the countries concerned, depending fundamentally upon the enlargement or contraction of the credit bases, however they were constituted.[1] The aspect to be stressed, moreover, is that these changes would only need to be relative. For example, owing to the fact that certain foreign central banks may hold a portion of their reserves in the United States,[2] or owing to the simultaneous expansion of Federal Reserve credit at the time of the gold outflow, made possible by the possession of excess reserves, the volume of American credit might not contract.[3] Nevertheless, the fact

[1] Although the emphasis of this chapter differs from that in Chapter V, "The Effects of International Payments in the Past," of the previous study by the National Industrial Conference Board, "The Inter-Ally Debts and the United States," pp. 138 ff., it is supported by the statistical material therein presented. The experience of Germany in the last few years which is exhaustively discussed in the various "Reports" of the Agent General for Reparations Payments furnishes especially important substantiation.

[2] Mlynarski, *op. cit.*, pp. 74–81.

[3] The immediate effects of a withdrawal of gold would depend upon the sources from which it would be acquired. If the gold were to move at the call of a foreign central bank, it might go directly from a Federal Reserve bank. This would result in a limitation of the country's gold stock available for additional credit expansion but might not affect the volume of bank credit outstanding. If the movement were protracted, affecting seriously the reserve position of the Reserve System, higher discount rates and other policies would be resorted to in order to restrain the use

that the credit base of certain borrowing countries would be widening and bank deposits expanding from the transfer of American borrowings and from other causes would be sufficient.[1]

The Effect upon International Trade

Naturally, with expanding credit purchasing power permeating the business economy of the borrowing country, production would be stimulated.[2] And with the stimulation of production would come an impetus to international trade.[3] For example, if the borrowing country were an established manufacturing area, whose productive organization required the importation of many raw materials for its operations, an important proportion of the expanding purchasing power would be utilized directly in foreign purchases. Likewise in the case of an undeveloped country whose exploitation of resources demanded increased importations of manufactured products, increased expenditures in foreign markets would result. In short, with both types of borrowers, the place of imported products and services in the domestic scale of demands would be of great significance in determining the diversion of expanding credit purchasing power in their direction.

In any country experiencing a diffusion of expanding pur-

of Reserve bank credit. If the gold moved at the instance of private bankers, it would probably go from the larger banks in the central money market. They in turn would resort to the Federal Reserve bank, holder of their reserves, to obtain the required amounts for export. Thus, their reserve deposits would be reduced and could only be restored by rediscounting or by reducing loans to customers. In the first case, again, rediscounting if prolonged, would affect the reserve position of the Reserve System and lead to more conservative credit policies. If the Reserve System possessed excess reserves, and conceived the maintenance of comparatively easy credit conditions desirable, it might maintain low rediscount rates, or even put new funds in the market through open-market purchases.

[1] In this connection, note the recent experience of Germany as reviewed by the Agent General for Reparations Payments, "Report," December 22, 1928, pp. 94–129.

[2] The first effects, however, might be felt in the borrowing country's money market leading to lower discount and interest rates. If this would stimulate a speculative boom, even more foreign capital funds might be attracted to participate. On the other hand, low interest rates might also stimulate an outward flow of funds to purchase securities abroad. The analysis in Chapter IV, although based upon the experience of the United States, suggests that both flows would tend to take place. As further illustrative, see also the Agent General for Reparations Payments, "Report," June 30, 1927, pp. 64–74 and June 7, 1928, pp. 77–8.

[3] *Ibid.*, December 10, 1927, pp. 93–6 and December 22, 1928, p. 109.

chasing power, moreover, standards of living would be tending to rise. Desires for goods and services formerly unsatisfied would be met from increased money incomes. Some of these enlarged demands would be for imported products and services and hence would be felt in foreign markets, particularly in those markets with which trading contacts had been most fully developed.

Thus forces would be operating merely as a result of expanding purchasing power to increase importations of goods and services from other countries in relation to exports.[1] This pressure would tend to persist, moreover, so long as foreign borrowing, with the consequences traced, would cause relative shifts in the volume of international credit to occur.[2] Increased imports over exports, it is clear, would be a means of increasing the supply of the borrowing country's currency available for exchanging the funds from continued loans, a development which would check an excessive inflow of gold and subsequent credit expansion.

American merchandise exports, particularly, would benefit from the increased foreign purchases of the borrowing country. These benefits would accrue in part directly and in part indirectly; directly depending on the position American products would hold in the widening scale of the borrowing country's demands, and indirectly depending upon trade repercussions resulting from increased purchases in other countries. Hence, additional foreign exchange would become available both from immediate export trade relations and from triangular or multangular trade.

Modifying Forces of International Trade

While these relative changes of purchasing power would be tending to effect rather immediate consequences to merchandise flows in international trade, modifying forces regularly operating would also have profound significance. Conspicuous would be the competitive struggle for trade expansion with its commercial rivalries for the domination of

[1] Since goods are much more responsive than services, the expansion of merchandise imports would be by far the more important.

[2] See Bertil Ohlin, "Equilibrium in International Trade," *Quarterly Journal of Economics*, Vol. XLIII, November 1928, pp. 184–5 in which the author points out that this has been the experience of smaller European countries.

markets. The imperfect character of that competition, however, and the incomplete nature of international market contacts would greatly affect the course and direction of trade currents. For example, the dumping of excess production by individual concerns would be an important influence. The operation of international cartels and agreements for the division of markets and the maintenance of prices would likewise play a part, as would also tariff and other trade barriers and governmental trade programs of all sorts.

Other features of the economic processes would be exerting an inevitable pressure. Price fluctuations and market stoppages, however caused, possibly tied in with the above mentioned factors and perhaps the result of seasonal influences and political disturbances, would be important, making as they do for relative variations in business activity in different countries. Finally, there would be the more stable aspects of economic growth, comparatively regarded, such as improvements in the technique of production, the development of new or improved products, and population movements and expansion.

Pressure towards International Price Level Changes

Traditional economics holds that expanding credit purchasing power in the borrowing country relative to that in the lending country leads to relative commodity price level changes and that these price level changes are the chief factors leading to alterations in merchandise balances of trade. The preceding analysis does not conflict with these conclusions which have been supported by inductive evidence;[1] it merely indicates that international merchandise and service movements may respond to net flows of capital funds in a comparatively short period. Commodity price level alterations may come in time, constituting additional influences stimulating the international flow of goods, although other price influences operating may postpone them.[2] If they should appear, however, they would only need to be relative as between the countries concerned.

[1] National Industrial Conference Board, "The Inter-Ally Debts and the United States," Chapter V, pp. 138 ff.

[2] As in the recent experience of the United States.

Take, for example, the developments in the United States. Obviously, if foreign securities are widely sold to individual American investors, they have less purchasing power with which to buy other things. Thus, they have to forego the actual use of some purchasing power for direct consumption purposes. But the purchasing power foregone would be available to the foreign borrower for expenditure. In other words, the aggregate credit purchasing power of the community would not be altered because of these security flotations, unless foreign lending exerted such pressure in the foreign exchange market that gold would flow out of the country, reducing the credit base. In the meantime, outgoing foreign payments would be offset by incoming payments. Merely a redistribution of purchasing power would be taking place, affecting some prices, but not of necessity the general price level.

When the net outflow of all payments on capital account, caused mainly by purchases of foreign securities, however, had finally led to a restriction of the credit base, time would be required before the effects would be diffused over the entire business community. The immediate influence would be felt in the particular line of activity in which credit could be most readily restricted. Possibly the money market, as such, would be affected first, with lower prices for securities; but the extent to which the security market would suffer would depend upon the willingness of brokers and speculators to bid higher for their credit needs against other types of business activity. When, finally, commodity prices had been influenced, the ensuing price level shifts, judging from past experience, would be generally as follows:[1] Prices of imported commodities, fixed under international competitive conditions or established in other than borrowing country markets, would not be affected. On the other hand, prices of imports purchased directly from the borrowing country would tend to be higher because, as will be shown, opposite credit shifts would be taking place there. Domestic prices, depending upon the channels from which credit is immediately restricted, would tend to fall or at least remain stationary.

[1] National Industrial Conference Board, *op. cit.*, pp. 187–8 and J. W. Angell, "The Theory of International Prices," Cambridge, Mass., 1926, pp. 408–9.

The reaction of export prices, lastly, would lag behind that of domestic prices, because exports are sold on foreign markets where prices have not fallen and in borrowing countries where credit expansion due to American loans is causing prices to rise.

Opposite changes would be taking place in the borrowing country. Probably they would become more apparent than those occurring in the United States, because the credit consequences of the capital flow would be of a more pronounced character. Not all classes of prices would respond to the pressure of expanding purchasing power. Import prices would not rise, and might conceivably fall in so far as the source of the imports would be the United States where prices would not be rising, relatively speaking, and possibly would be falling. Domestic prices, however, would tend to move upward, though not all sections of the domestic price level would be affected. Much would depend upon the uses to which the expanding credit was put and the facility with which productive capacity would respond. Export prices might rise slightly, because costs would be rising in export industries with the rise of domestic prices, but exports are sold abroad where the same expansion of purchasing power would not be occurring. Their movement, therefore, would depend on conditions obtaining in foreign markets.

Price Level Shifts and the International Flow of Merchandise

While the international flow of commodities would be more or less immediately stimulated by the relative shifts in purchasing power, previously described, these obscure price level changes would constitute yet further forces when they had become sufficiently marked. The United States would tend to have increased exports of a variety of commodities on which a competitive advantage could be gained owing to relatively lower costs resulting from the price level shift. They would tend to go directly to whichever markets afforded the most profitable outlet in terms of price and sales, depending upon the character of the commodity, and of the trade connections and relations previously established. Furthermore, with a tendency towards comparatively lower prices in the United States, imports of certain commodities

would tend to be checked. The contraction of domestic prices, which would be affected the most, would tend to cause prices of imports, for which the American demand is most elastic, to appear relatively more expensive. Accordingly imports of them would tend to fall off.

The shifts with respect to the borrowing country would be generally the converse. The tendency towards rising prices would tend to stimulate certain imports and retard certain exports. The commodities figuring the greatest in the increased imports would be those whose demands had widened with the expansion of purchasing power and whose prices remained relatively the lowest. While their source might be in part the United States, these increased imports, depending again upon their character, would tend to come from those countries with which the borrowing nation had the closest trade relations, or where prices were most out of line in comparison with its own. Exports, on the other hand, would tend to be retarded because rising domestic prices would eventually tend to raise costs among exporting as well as other industries. Hence, unless higher costs could be absorbed in increased sales, the volume of goods produced for export would be restrained.

The above analysis is complex and many qualifications owing to incomplete international competition, dumping, cartel agreements, tariff barriers, seasonal and other fluctuations, political influences and factors of economic growth, already suggested, obviously are required. Prices and hence price levels are always in a state of flux. The changes here in mind are those of a more or less enduring character, apparent after the passage of time. Some effect upon international commodity movements would likely result from them, depending chiefly upon the extent and permanency of the shift. The resulting alteration in international commodity flows might take any one of a number of turns. An absolute increase of exports from the United States might not occur, but a relative reduction of imports might take place. On the other hand, the absolute increase of imports by the borrowing country might not be large, but the relative contraction of exports might be considerable. In any case, the international price level shifts, when and in the degree

that they did take place, would be a factor in increasing the supply of foreign exchange necessary to facilitate the continued net movement of capital funds from the United States to the borrowing country. They would have significance, therefore, in the maintenance of international financial and economic equilibrium.

A Net Inflow of Capital Funds and Other Capital Payments and American Foreign Trade

The extension of any foreign loan depends among other things upon the banker's judgment of capacity to repay the principal and to carry the interest burden. Essentially this is one of the chief tests. Whether they are to be used for productive purposes, as plant extensions, public works and so on or whether they are to be used for financial reorganization and rehabilitation, are pertinent issues only with regard to this central point. Every foreign loan extended by the United States involves an annual receipt of a certain sum on loan service account, interest and dividends, until the loan matures and is finally paid off. Similarly, a property investment ordinarily involves the annual receipt of dividends. With the growth of an international creditor position, the volume of inflowing payments on long-term capital service account gradually swells until it equals and finally exceeds the volume of capital funds going out of the country to purchase new securities and properties. Eventually, it would seem clear, the time will be reached when the varying counterflow of capital funds dispatched by foreigners for investment in American security markets and properties, of which there will always be some, will be so augmented from loan service payments that an enduring net inflow of all payments on investment capital account will result. Concurrently, the indebtedness of certain borrowing countries will have reached a point where capital service payments, in addition to whatever long-term capital investments they may be making abroad, will exceed incoming receipts of capital funds from new American loans and investments.

Always, of course, there would be considerable variability

from year to year in the net flow of all payments on long-term capital account owing to the changing volume of the investment fund flows themselves, or rather, the interdependence of purely capital payments and all payments on capital service account. Moreover, the net direction of the stream of all payments on long-term capital account would be modified by the altering currents of payments on short-term capital account. Ultimately, nevertheless, the situation which has been pictured would become sufficiently pronounced that its enduring character would be evident. At the risk of repetition, it may be advisable to consider the consequences which might develop, admitting the tentative character of the analysis. In general, they would be the converse of those described in the preceding analysis. The treatment, therefore, may be summary.

The Immediate Effects of a Net Inward Flow of Capital and Capital Service Payments

The first influence of the net inflow of all payments on capital account would be felt in the exchange markets. Many debtors in various parts of the world would be competing with others who have American remittances to make to obtain dollars with which to meet their interest charges, bond redemptions or sinking fund requirements and dividend obligations. When market reserves of dollars finally become depleted, the possibilities of finance bills exhausted, and central bank foreign exchange reserves reduced below the point deemed desirable, exchange rates would reach the gold points in countries most greatly affected, and gold would tend to flow from them to the United States.

Forces would be set in operation tending to cause a shift in the volume of credit purchasing power in the United States relative to that obtaining in the principal debtor countries. Their operation, however, would be modified by central banking policies formulated and carried out either individually or in cooperation with other central banks.[1] For example, if the central bank of the debtor country possessed excess reserves, a shipment of gold could be allowed with no immediate retarding influences upon the growth of bank

[1] Or the new "Bank of International Settlements," if established.

credit, as higher discount and interest rates.[1] How long this might continue would depend upon the persistence of an adverse movement of capital funds. Probably efforts would be made to avoid drastic effects.

On the other hand, Federal Reserve banks might take steps to prevent too abrupt consequences from a gold inflow. For example, security holdings might be reduced on the open market if an ample portfolio existed offsetting the effects of the gold imports, higher discount rates and acceptance buying rates might be maintained, and moral pressure might be exerted against Reserve bank borrowing by member banks. Of course, there would be a limit to the first-named factor and the others would be insufficient to prevent direct credit expansion in the banking system.[2] They could, however, be supplemented by foreign exchange operations similar to those conducted by foreign central banks;[3] or gold could be purchased abroad temporarily as a non-earning asset. Thus, although the Reserve banks would be facilitating the capital transfer process through credit expansion, this credit expansion would take place at higher costs. Similar results might even accrue from merely replacing Federal Reserve notes, greenbacks or National Bank notes with gold certificates. Finally, legislation might be passed raising reserve requirements.[4]

Whatever policies central banking organizations might

[1] The effect of a reduction of any foreign exchange reserves of foreign central banks upon its domestic credit position would depend on whether they were primary legal reserves or secondary reserves maintained in supplementary support of credit policy. If a particular central bank had no dollar balances but had sterling balances or any other foreign balances, it might readily liquidate these in exchange for dollars, a triangular transaction being involved. If a gold shipment should be finally required, a conversion of these balances would take place, since they would ordinarily be held in free gold markets. Thus a gold movement resulting from the net transfer of capital funds might be indirect rather than direct.

[2] Any increase in reserve balances of member banks tends to lead to increased lending. The credit expansion possible on reserve balances by particular banks depends upon the resurgence of the created bank deposits to its own accounts. If they are transferred to other banks, they in turn may expand upon them. Thus, the particular point to which credit expansion may go because of additional reserve balances cannot be indicated, although ultimate primary credit expansion may be carried at least as many times as fifteen. For a recent analysis of the primary credit expansibility of Federal Reserve bank deposits of member banks, see Lawrence, *op. cit.*, pp. 362–74, also Chester A. Phillips, "Bank Credit," New York, 1920, pp. 32–74.

[3] Under powers granted in the Federal Reserve Act, Sec. 14, (a), (b), and (c).

[4] Burgess, *op. cit.*, pp. 257–9 and 270.

pursue, some relative shift in purchasing power, nevertheless, would tend to occur. When it had become of sufficient importance, effects would be felt in international trade,[1] modified, inevitably, by all factors of international competition, variations in productive activity, however caused, and economic growth. Imports, not only of merchandise, but to a lesser extent of services into the United States would be stimulated, while those into the debtor country would be relatively retarded. Oppositely, a comparative shift of exports of merchandise and services would occur, those of the debtor country being stimulated both directly and indirectly. Particular commodities and services would move more or less freely in international commerce, according to their altered importance in national demand scales. As a final consequence, additional foreign exchange would be made available for the transfer of capital funds contributing to restored equilibria in international exchange.

The Commodity Price Level Shifts and Movements of International Trade

Ultimately, these relative changes in purchasing power might lead to international commodity price level shifts if other price factors did not offset them, and these price level shifts in themselves might be a contributing factor in the maintenance of exchange stability. Substantially, they would be the opposite of those described previously. For instance, in the United States, experiencing credit expansion, domestic prices would tend to be affected in the greatest degree. Import prices dependent upon international competitive conditions would not respond. Export prices might eventually be influenced, because costs would be raised by higher domestic prices, although higher costs for such reasons could be absorbed in some industries through an expanded volume of sales. At any rate, exports are sold in foreign markets and would be subject to price conditions prevailing there.

In the debtor country, domestic prices would be falling

[1] Their first effects might be in the money market, however, leading to a speculative outburst, stimulating an additional inflow of foreign capital funds to participate, but at the same time causing lower interest rates and an increase of foreign borrowing or the outflow of capital funds.

relatively to those in the United States. Import prices would react slightly, but would be affected least because import prices depend on price conditions abroad. Finally, export prices would move between domestic and import prices. Export prices would likewise be influenced by foreign conditions, but costs would be relatively lower owing to the contraction of domestic prices, and this would enable a price advantage in foreign markets. Presumably, competition would cause some export prices to fall and consequently the general level of export prices to react.

As these changes became more pronounced, merchandise flows would be influenced. The United States would tend to import more, especially of those commodities whose prices had remained relatively the lowest, giving them a more important place in the community's demand scale. They would tend to come from whichever markets the greatest price advantage could be gained and wherever buying contacts were the most firmly established. Exports might be retarded, furthermore, because higher domestic prices would involve higher production costs, unless higher costs could somewhere be absorbed.

The debtor country, on the other hand, would tend to experience increased exports among whatever commodities would be marketable at lower costs and prices. They would tend to go, moreover, to countries offering the most advantageous market outlets, either because of existing trade relations or because of prices obtainable. Imports of certain commodities would tend to fall off, finally, because the relative decline of domestic prices would make them comparatively more expensive.

General Conclusions

The general conclusions of this chapter may be readily summarized. If a net international movement of all payments on capital account in either direction takes place, pressure upon the volume of purchasing power both of the paying and receiving country would tend to follow, causing credit purchasing power in the former to contract and in the latter to expand. The extent of these relative shifts in the volume

of credit purchasing power would hinge upon variations in the basic bank reserves of the countries concerned over which central banks would exert a considerable amount of control. Their actions and policies, pursued individually or in cooperation, therefore, would constitute an intrinsic part of the accompanying developments. The shifts in credit purchasing power would involve repercussions in international merchandise and possibly service movements tending to restore equilibria in international exchange. In some instances the changes in purchasing power would lead to relative shifts in international price levels and these would be additional factors in trade flows and the maintenance of international equilibria.

The international financial relations of the United States are complex and involve many countries. They will be increasingly so in the future. With one country a net outflow of all capital payments may be occurring, while with another a net inflow of such payments. Hence, the operation of the tentative formula herein persented will be often difficult to trace. Nevertheless, it may be taken as substantially descriptive.

Full recognition must be given to the diverse character of possible future capital movements. In the next chapter, therefore, America's future balance of all capital payments will be treated as a whole. The conclusions reached may then be related to the entire balance of international payments. Finally, future financial relations geographically will be considered. Since any projection into the future regarding economic and financial trends is subject to modifications because of errors in judgment and developments which cannot be foreseen, the provisional character of the conclusions must be kept in mind.

CHAPTER X

THE PROBLEM OF THE FUTURE

WHATEVER extraordinary influences at work in the past brought the United States to her present international financial position, there remains the problem of the changes which this position may undergo in the future. An attempt to preview the probable trend of America's international financial relations, in other words, is the final requisite of this study, and serves as a summing up of the foregoing discussion. Four inclusive questions must be dealt with: First, what may be the major direction of the future international flow of all capital payments? Second, to what extent might a commercialization of Germany's reparations debt and the employment of the funds received affect the aggregate movement of capital funds? Third, what may be the relationship of these capital payment movements to future flows of gold, commodities and services? Finally, how may America's present international debtor-creditor relations with particular areas be expected to change?

These questions concern economic and financial developments whose nature is highly problematical. No one can speak of the future with assurance. The more distant the time contemplated, furthermore, the more subject are any predictions to error. Nevertheless, it is largely upon judgments regarding the future consequence of America's international financial relations that national policies must be formulated by the Government, and banking policies determined by Federal Reserve authorities. If individual industrial, commercial and banking institutions are to avoid difficulties of adjustments which may be required by the operation of broad forces originating in international capital movements, their attention must be diligently devoted to an understanding of the factors involved. They are necessarily manifold, but they may be generally indicated in the succeeding pages.

The Future Movement of International Payments on Capital Account

The fundamental composition of the international stream of payments on capital account is exceedingly complex and defies any clear-cut analysis. Currents and cross-currents of an almost inextricable nature characterize its movement. The impossibility of obtaining in any reliable way more than a broad description of the flow of payments on long-term capital account and only a rough outline of the net course of payments on short-term capital account has been indicated. Moreover, the stream has been viewed only from year to year. Despite these deficiencies, the earlier descriptions of the trends may be summarized in order to impress upon the reader their probable permanent significance.

In Chapter IV it was seen that, while there was a large net outflow of long-term capital funds in every post-war year excepting 1923, this outflow was generally more than offset after 1922 by the net inflow of long-term capital service payments. When the entire annual movement of all payments on capital account was considered, including payments on short-term capital account, employing rough figures for the sake of clarity, the net movement was about as follows:

1920—A large net outward flow of all capital payments, possibly over $1.7 billions, slightly less than half of which was represented by net payments on long-term capital account.

1921—A net outflow of all capital payments of perhaps $500 millions due to a net outward movement on both long-term and short-term capital account.

1922—A net inflow of around $300 millions, owing to the current of payments on short-term capital account.

1923—A net inflow of about $700 millions, owing to the large net movement of all payments on long-term capital account.

1924—A minor outward movement of all capital payments or approximately a balance. The direction of all payments on long-term account was outward, while it was inward for those on short-term account.

1925—A minor outward movement or approximately a balance. The net flows of all payments on long- and short-term capital accounts were the reverse of those for 1924.

1926—A net inflow of all payments on capital account of around $450 millions, most of which was due to the large net inflow of payments on short-term capital account.

1927—A minor outward movement.

1928—A large net outward flow of nearly $300 millions or over, due to the movement of payments on short-term capital account.

The net flow of all payments on capital account after 1921 is thus seen to have been heavily into the United States in 1922, 1923 and 1926, while it was largely outward in only one year thereafter, 1928. Payments of various kinds on both long- and short-term capital account, moreover, influenced this net flow. As a result, several questions may be raised when future trends are contemplated. For instance, can it be expected that the United States will continue to absorb, as in the past, a sufficient volume of new foreign capital securities in coming years, and in addition make sufficient purchases of outstanding securities on foreign security markets and direct investments in foreign properties, to exceed the volume of foreign capital funds flowing to the United States for security and property investment? What of the net flow of capital service payments? Will it continue to exceed slightly the net outflow of capital funds or will it probably exceed the latter by larger and larger amounts? What of the influence of the varying movement of all payments on short-term capital account? Can a consistent net flow of such payments be expected. In brief, what are the possibilities of a protracted excess of all outward payments on capital account? On the other hand, is there a likelihood of a lasting inflow of all payments on capital account?

It is obvious that answers to such questions can only be advanced tentatively. Moreover, they rest necessarily upon the arbitrary assumption that developments normally observable in the past will continue in the future. Since the

general stream of payments on capital account moving internationally is constituted of many parts which may be generally classified according to their character, the problem can best be approached by analyzing each separately.

The General Character of Outward Payments on Long-Term Capital Account

In order to review the general nature of the payments on long-term capital account which have moved out of the country in the past, the reader should refer to Table 40, and Chart 17 showing the percentage distribution according to the purpose of the flow. The major proportion of all outward payments on long-term capital account was for the purchase of new foreign securities. When funds migrating to acquire outstanding securities on foreign financial markets and the direct purchase of foreign properties are included, the percentage for investment abroad is seen to range from 77.7% in 1923 to 90.9% in 1928. To be sure, the future distribution may undergo comprehensive changes, but the trend evidenced may be fairly interpreted to suggest that the chief reason for the outward flow of payments on long-term capital account will be for foreign investment purposes. In other words, they will be composed mainly of purely capital investment funds. It should be remembered, however, that foreigners have been active buyers of American securities in recent years, over and above the volume which has been resold by them, and that such purchases have influenced capital service payments to them.

They will probably continue to be regular investors in future years so long as American investment opportunities remain numerous and profitable. Outgoing payments on long-term capital account from the United States for interest, dividends and bond redemptions may be expected to maintain their relative importance consequently, if not actually to increase.

The Prospects for the Continued Flotations of New Foreign Issues

The expansion of new capital issues for all purposes, excluding refunding, in the United States has been a notable

CHART 17: THE PERCENTAGE DISTRIBUTION OF THE VARIOUS CLASSES OF OUTWARD PAYMENTS FROM THE UNITED STATES ON LONG-TERM CAPITAL ACCOUNT, 1920–1928

(Source: Table 40)

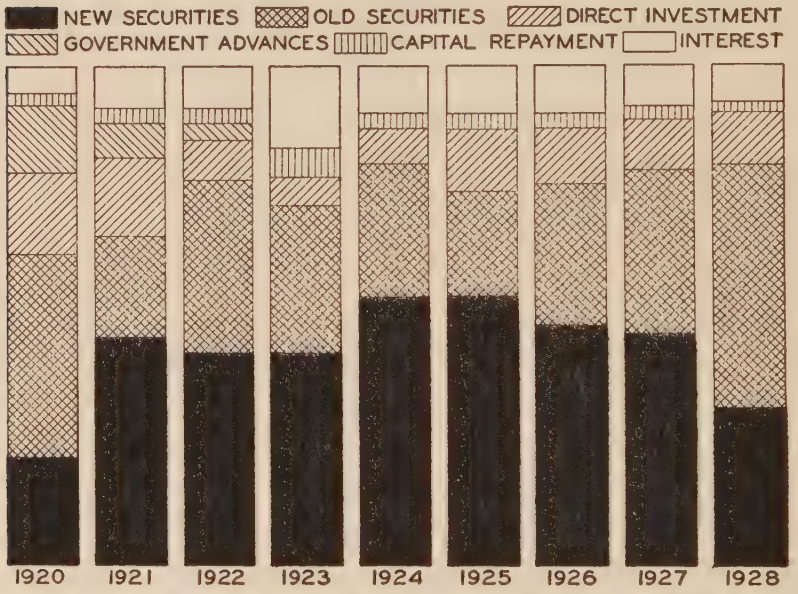


TABLE 40: PERCENTAGE DISTRIBUTION OF THE VARIOUS CLASSES OF OUTWARD PAYMENTS FROM THE UNITED STATES ON LONG-TERM CAPITAL ACCOUNT, 1920–1928

(Computed by the National Industrial Conference Board)[1]

Year	Total	New Security Imports	Outstanding Securities Imported	Direct Investment of Americans	Government Advances to Foreign Governments	Redemption and Sinking Fund Repayments	Interest on Private Investments
	%	%	%	%	%	%	%
1920	100.0	21.8	40.5	16.5	13.5	2.2	5.5
1921	100.0	45.7	20.3	16.0	6.8	3.2	8.0
1922	100.0	42.6	34.7	7.9	3.6	3.1	8.1
1923	100.0	42.7	29.5	5.5	..	5.9	16.4
1924	100.0	53.5	27.1	6.9	..	3.3	9.2
1925	100.0	53.9	21.0	12.4	..	3.4	9.3
1926	100.0	48.1	28.3	11.4	..	3.1	9.1
1927	100.0	46.5	32.6	10.1	..	2.8	8.0
1928	100.0	31.7	48.5	10.7	..	2.0	7.1

[1] See Table 9 of this volume.

feature of post-war financial history, the volume for 1928 being 121% above the volume for 1920. For the problem at hand this increase must be studied as between domestic and foreign issues, exclusive of refunding. From 1920 to 1927, excepting 1923, the growth of the latter was very much faster than for the former, while in 1928 it dropped off. New domestic issues, on the other hand, continued to grow. During the entire period new foreign issues increased 232% while domestic issues grew 108%. Necessarily, both developments varied from year to year, as the figures in Table 41 indicate.

TABLE 41: NEW CAPITAL ISSUES, EXCLUSIVE OF REFUNDING, ON THE AMERICAN FINANCIAL MARKET IN EACH YEAR RELATIVE TO THE VOLUME FOR 1920

(Source: *Commercial and Financial Chronicle*.[1] Computed by the National Industrial Conference Board)

Year	New Foreign Issues	New Domestic Issues	All Issues
1920	100	100	100
1921	139	93	98
1922	169	112	118
1923	72	124	118
1924	251	142	154
1925	274	158	171
1926	289	160	174
1927	393	192	214
1928	332	208	221

[1] Based on the review of past security flotations, *Commercial and Financial Chronicle*, Vol. 28, Jan., 1929, pp. 316–7.

The material of Chapters V and VI may be recalled here. Easy money market conditions fostered by the rapid expansion of bank credit undoubtedly played a decided part in the ever larger quantity of new security offerings. In other words, a large portion of them was absorbed merely by the extension of bank credit, although re-investment from maturing issues and new savings was of course important.[1] Accordingly, it would appear that the future emigration of long-term capital funds because of the purchase of new foreign security issues would be limited to some degree by the further expansion of credit, although this limitation may be offset by a greater readiness of individuals and corpora-

[1] See also B. M. Anderson, "An Analysis of the Money Market," *Chase Economic Bulletin*, Vol. VIII, June 4, 1928, p. 23.

tions to assign their incomes to foreign investment, or a more effective mobilization of savings by investment trusts, insurance companies, and banks. With the present gold stock of the country,[1] a continued growth of bank credit is possible through an increase in Federal Reserve credit,[2] but a primary expansion of credit similar to that which took place in the past period would have to hinge upon a rapid accumulation of gold from domestic production or a considerable importation from abroad. Much depends, therefore, upon policies which may be followed by Federal Reserve banks. It would seem, however, from their operations in the past and especially in 1928 and the first half of 1929, that while Federal Reserve authorities may be willing to see excess reserves brought into use, they will endeavor to restrain more than a gradual employment of them. How successful such efforts may be, only the future can reveal.

Notwithstanding the efforts Federal Reserve banks may make to prevent the expansion of credit, such expansion as does occur will be a factor in the number of new security flotations insofar as the funds flow into the money markets directly. Unless countered by a more efficient assembling and a more rapid expansion of new savings funds, therefore, the effect of any checks upon credit growth will be evident in the prevalence of higher money rates and consequently lower prices for fixed income securities. This may restrain the growth of such new foreign issues, unless those who wish to float them were willing to pay higher prices for the privilege.

If a much slower future growth of bank credit is granted and no abnormal increase in new savings funds is assumed, it follows that a slower expansion of new security offerings may occur in the coming period. There is still the chance, however, that new foreign security issues might expand relatively to domestic issues, thus enabling an increasing

[1] Excess reserves of slightly over $1 billion were possessed by the Reserve System at the end of 1928. The withdrawing of gold certificates from circulation and the replacing of them by Federal Reserve notes backed by commercial paper could further enlarge this amount somewhat. See the editorial, *Federal Reserve Bulletin*, Vol. 14, September, 1928, pp. 613–4.

[2] A continued growth of time deposits, such as has occurred in the past few years, would enable member banks of the Federal Reserve System to increase their operations without a corresponding increase in their reserve requirements.

emigration of long-term capital funds because of them. But new foreign capital flotations, in spite of their rapid growth, have never been more than 18% of the total and in most years somewhat less. They might in the course of time, stimulated by skillful investment trust and other corporate purchases because of attractive yields, approach in American financial markets the importance they have attained in the British market, but such a development can scarcely be anticipated to take place abruptly. Moreover, with greater recovery in other world financial centers following the final reestablishment of gold standard conditions abroad, a growing equalization of interest rates should appear and an increasing competition in foreign lending. More and more recourse to other loan markets by foreign borrowers, therefore, may be anticipated. When weight is given to this possibility and to the probable domestic demands for the employment of capital funds, which will doubtless be increasingly large because of expanding industry and population, it does not appear that a great growth of new foreign issues relative to the total can be expected.

Notwithstanding, it is not likely that the mechanism for distributing foreign securities in the American investment market and the foreign financial connections of the international banking houses will be allowed to atrophy by those having financial interests at stake. Nor is it to be expected that the receptiveness of American security buyers to foreign security offerings, developed only after some educational effort on the part of large security houses, will entirely abate so long as there is an interest or profit differential to be obtained through foreign investment. An unlooked-for domestic or international catastrophe profoundly influencing the psychological attitudes of the investment market, however, might undermine this receptiveness.[1]

[1] For example, the world wide depression of 1873 and the accompanying defalcations of foreign debtors to British investors definitely affected their subsequent willingness to invest in foreign securities. The British investment market foreign issues did not fully recover for several years. See Hobson, *op. cit.*, p. 142. It should be observed that the public memory is essentially short-lived and the effects of any possible disturbance upon the investing groups may be of relatively brief duration, depending upon the character and importance of the disquieting incident.

The Outlook for American Purchases of Old Capital Issues and Direct Investment Abroad

In general, a persisting volume of outgoing capital funds to purchase old capital issues in foreign financial markets may be counted on, varying of course, from year to year as the relative conditions in various security centers differ from each other. As in the case of new foreign issues, a portion of the past movement of funds for such purposes has depended upon expanding bank credit. With a slower rate of credit increase, a slower growth of outstanding securities acquired abroad may take place. Again, a part of the movement resulted from arbitraging and operations to adjust yields in various security centers. The coming shift from year to year consequently, will depend partly upon the existing inter-relationship of security markets and the mechanism of international security exchange, and the disposition of individuals and investing corporations to take advantage of foreign security market opportunities in preference to domestic. It will also hinge upon the significant tendency for the international financial integration of large industrial corporations directly or indirectly by holding companies or investment trusts. Foreign markets, after all, may be exploited, and foreign raw materials, technical knowledge and industrial processes controlled by the purchase of outstanding proprietorship equities of foreign corporations as well as by the outright foreign property expansion of American corporate enterprise. A regularly large and expanding investment by Americans in the securities of foreign enterprise may be predicted because the financial interests of individuals, banks, investment trusts, insurance companies, and large industrial concerns have become more international in scope.

For the same reason, it may fairly be said that there will be a persisting volume of direct investment by Americans in foreign areas. As international business relations progress, it is only natural that the property interests of the parties engaged in them should expand. Thus, as individual Americans or American enterprises become inclined to engage more extensively in foreign trade, either from pressure of over-capacity to supply domestic markets or from a desire

to enlarge their operations or to own foreign sources of raw material supply, more and more direct capital investments abroad will be made by them in Canada, Europe, South America, and Asia. The respective advantages and prospects for the purpose in mind, commercial, industrial or financial, will underlie decisions arrived at.

The Possible Course of All Outgoing Payments on Long-Term Capital Account

It has been suggested previously that outflowing payments on investment capital account for interest and principal repayment to foreigners will increase with the further increase of foreign investments in America. Judgment may be ventured, therefore, upon the possible course of all emigrating payments on capital account distinguishable by their relation to long-term investment. Before doing so, however, the reader should observe again the character of the flow in past years as shown in Table 42.

TABLE 42: SUMMARY OF AMERICAN EXPORTS OF FUNDS ON LONG-TERM CAPITAL ACCOUNT, 1920–1928

(Arrangement by the National Industrial Conference Board)[1]

(In millions of dollars)

Year	For Interest and Capital Repayment	For Investment	Total	Index of Total, 1920 = 100
1920	140	1,682	1,822	100.0
1921	140	1,109	1,249	68.6
1922	165	1,306	1,471	80.7
1923	190	664	854	46.9
1924	205	1,432	1,637	89.8
1925	225	1,543	1,768	97.0
1926	255	1,844	2,099	115.2
1927	273	2,267	2,540	139.4
1928	322	3,223	3,545	194.6

[1] See Table 9 of this volume.

One point should be stressed. The exports of all long-term funds for investment each year did not result in an equal annual increase in America's gross creditor position. Part of the funds went for the repurchase of American securities from foreigners. In addition, new investment was offset by the repayment of principal on existing foreign indebtedness. Nevertheless, according to Department of Commerce

estimates, the gross amount of foreign indebtedness to private American citizens was increasing after 1923 at the rate of at least one billion dollars a year.

In general, the entire outflow of payments on long-term capital account will depend mainly upon the volume of new foreign investment. The final determining factor will be the comparative profitableness of capital employment in foreign as against domestic production. This, however, will rest upon the individual judgments of a wide number of persons, some of whom will be investors and others of whom will be officials or responsible experts of commercial and industrial corporations, banks, investment trusts and insurance companies. To some, opportunities in foreign fields will loom large, while to others domestic enterprise will appear to offer the larger profit. Considerations of risk, freedom of capital employment,[1] raw material requirements, needs for acquiring foreign technical skill and industrial processes, and the possibility of promoting consumer demand, will be important as will also the available knowledge at hand. It seems likely that a regular export of some funds for foreign investment would endure but only a gradual growth over that of the past may be conservatively previsioned. Possibly, an annual addition of one billion dollars to the country's gross creditor position, as in the recent years, might continue to occur.

The General Character of Inflowing Payments on Long-Term Capital Account

The composition of past inflowing payments on long-term capital account is shown in Table 43 and Chart 18. The major proportion of all inward payments, so classed, was for the purpose of meeting service charges on the accumulated indebtedness of foreigners before 1926, but in 1926 slightly less than half, and in 1927 and 1928 slightly more than half went for the purchase of outstanding securities and direct investments. Thus, debt service receipts, as a whole, were a declining percentage, while incoming foreign funds for the purchase of outstanding securities were an increasing per-

[1] Doubtless, a factor in American acquisition of foreign public utility properties will be comparative freedom from public regulation.

CHART 18: THE PERCENTAGE DISTRIBUTION OF THE VARIOUS CLASSES OF INWARD PAYMENTS TO THE UNITED STATES ON LONG-TERM CAPITAL ACCOUNT, 1920–1928

(Source: Table 44)

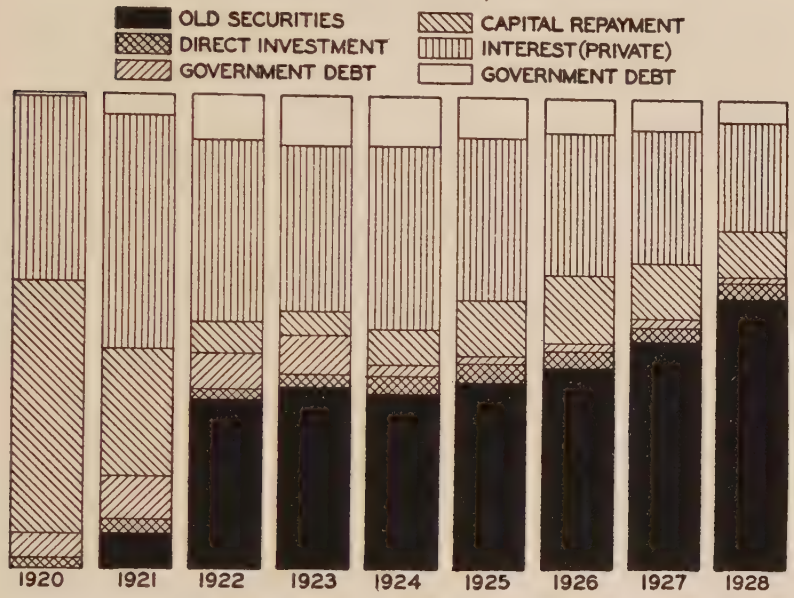


TABLE 43: PERCENTAGE DISTRIBUTION OF THE VARIOUS CLASSES OF INWARD PAYMENTS TO THE UNITED STATES ON LONG-TERM CAPITAL ACCOUNT, 1920–1928

(Computed by the National Industrial Conference Board)[1]

Year	Total	Outstanding Securities Exported	Direct Investments of Foreigners	Principal of Government Advances Returned	Redemption and Sinking Fund Payments	Interest on Private Investments	Interest on Government Advances
	%	%	%	%	%	%	%
1920	100.0	..	2.3	4.8	53.2	39.1	0.6
1921	100.0	7.6	2.6	9.5	26.6	49.6	4.1
1922	100.0	35.9	2.2	7.3	6.7	38.7	9.2
1923	100.0	38.3	2.9	8.3	5.0	35.1	10.4
1924	100.0	37.1	3.9	2.2	7.7	38.8	10.3
1925	100.0	39.8	4.1	1.4	11.8	34.4	8.5
1926	100.0	42.9	3.7	1.6	14.3	30.4	7.1
1927	100.0	48.5	3.1	1.8	11.7	28.7	6.2
1928	100.0	57.9	3.3	1.4	10.1	22.8	4.5

[1] See Table 9 of this volume.

centage. Finally, it should be observed that debt service receipts from foreign government debtors to the United States Government were less important in every year than those from all other foreign debtors to private American investors. In fact, in the last four years, the percentage decline of the former was comparatively greater than that of the latter.

Future Investment Service Receipts

The future volume of inward payments on long-term capital account would appear to be dependent upon, first, the expansion of investment service charges due Americans by foreigners and, second, the inflow of foreign capital funds for the purchase of outstanding securities and for direct investments. Imports of the debt service funds will naturally vary directly with the total volume of American foreign investments. It should be possible, therefore, to arrive at a conjectural view of their future volume by the employment of several arbitrary assumptions concerning the future gross creditor position of the country.

For example, if it is assumed speculatively that one billion dollars a year would be a conservative guess at the annual increase in the volume of private American investments, their total would be approximately:

By 1930	$15.5 billions
By 1935	20.5 "
By 1940	25.5 "
By 1945	30.5 "

Estimated interest and dividend receipts from these respective totals would depend upon the rate of return which is applied to them. The annual weighted average return upon foreign securities of all kinds offered to investors from 1924 to 1928 was found to be successively 6.09%, 6.11%, 6.18%, 5.98% and 5.67%.[1] With the achievement of more stable economic conditions in foreign areas and the recovery of other sources of capital supply, the average return may fall to as low as 5%. Perhaps that rate is more correct as an arbitrary approximation for the more remote year 1945, a

[1] Information furnished by Ray O. Hall, Assistant Chief, Finance and Investment Division, Bureau of Foreign and Domestic Commerce, U. S. Department of Commerce.

5.5% rate for the intervening years and a 6% rate for the nearest, 1930. Employing these percentages with full regard for their conjectural character, interest and dividend returns upon the above stated volumes of foreign investments have been estimated and the figures entered in Column I of Table 44.

Estimated return of principal for redemption of securities and sinking fund requirements, may be calculated at 2.5% of the outstanding indebtedness of foreigners to private American investors.[1] The results appear in Column II and the total service receipts from private investment in Column III.

Overlooking for the moment the possibility of an increased inflow of payments on capital account for a partial liquidation of government debts due the United States as a

TABLE 44: ESTIMATED CONTRACTUAL PAYMENTS BY FOREIGNERS TO AMERICANS BECAUSE OF FOREIGN INVESTMENT IN VARIOUS FUTURE YEARS

(In millions)

Year	Estimated Interest Receipts from Private Investments	Estimated Return of Principal from Private Investments	Total Estimated Service Receipts on Private Investments	Schedule Interest Receipts of U. S. Treasury from Government Debtors[1]	Schedule Principal Repayments to U. S. Treasury from Government Debtors[1]	Total Scheduled Service Receipts from Government Debtors	Conjectural Total Service Receipts on All Long-term Foreign Debts
	I	II	III	IV	V	VI	VII
1930	$930	$388	$1,318	$146	$74	$220	$1,538
1935	1,128	513	1,641	208	95	303	1,944
1940	1,403	638	2,041	202	147	349	2,390
1945	1,525	763	2,288	226	138	364	2,652

[1] The consummation of a funding agreement with the Russian Government would increase these amounts somewhat.

result of the commercialization of Germany's reparations debt, interest and principal repayments in connection with governmental debts due the United States Government may be estimated from the various schedules of payments provided in the funding agreements described in Chapter VIII. They are included in Columns IV and V and their total in Column VI of Table 44. The combined total of all conjectural foreign investment service charges in the specified years may be observed in column VII.

[1] The estimated redemption and sinking fund receipts from foreigners were 2.8% of the approximate indebtedness in 1926, 2.5% in 1927 and 2.7% in 1928. Of course, if new foreign flotations should consist more and more of common and preferred stocks, this percentage would decline.

By 1930, it is seen, payments on long-term capital account returning to the United States because of the contractual obligations of foreigners to Americans might be about $1.5 billions; by 1935, $1.9 billions; by 1940, $2.4 billions; and by 1945, $2.7 billions. If foreign purchases of outstanding securities and their direct investments should endure in the volume of the last two years, or even expand, another billion could be added conservatively in each of the above years for all incoming payments on long-term capital account. But can this latter be reasonably expected?

Foreign Purchases of Outstanding Securities and Direct Foreign Investment

The inflow of foreign capital funds for investment purposes has been extremely large in recent years. In fact, imports of such foreign funds have been especially large in the last three years, increasing 64% in 1928 alone. When the rising security values on American financial markets are taken into account and the volume of American securities resold by foreigners, it would seem probable that a share of these funds was attracted by possible speculative gains. Another share came to repurchase foreign issues floated on the American market because of higher yields obtainable than from those offered at home. A large part, however, doubtless came for permanent investment. With less speculative conditions prevailing in American security markets, and with more permanent economic recovery in foreign areas, a contraction of this type of investment fund imports might take place.

Nevertheless, a large inflow of long-term capital funds may be anticipated to continue. Its volume will depend upon a number of factors. In the first place, the judgments of individual foreigners regarding American investment opportunities relative to those in other areas will be important. So also will be those of the experts and executives of foreign financial institutions, banks, investment trusts and insurance companies. Some purchases of securities will be made by foreign corporations and banks more closely to ally their interests with American industry and finance. Moreover,

foreigners, motivated by the same considerations will regularly buy back foreign securities issued or held in America, both of their own and other areas. Finally, direct investments or acquisitions of American properties will be ordinarily made by foreign enterprises developing American trade relations. Credit expansion in particular foreign areas may stimulate, of course, the inflow of foreign investment funds from time to time.

In view of the many factors involved, it is virtually impossible to suggest any reasonable figure which could serve as a guide to a judgment of the possible future inflow of foreign investment funds. Perhaps a guess of one billion dollars as the minimum about which the movement would vary might be conservative. On the other hand, with a substantial economic growth, a much larger volume may be received. In any case, in so far as these imported foreign investment funds result in a permanent accretion of foreign holdings of American securities, the amount of capital service funds exported from the United States for interest, dividends and the repayment of principal will tend to increase. How much can only be surmised.

The Future Course of All Incoming Payments on Long-Term Capital Account

No final opinion should be reached regarding the future course of all inward payments on long-term capital account without retracing the general nature of the flow in the past nine years. This information is presented in Table 45. The most striking aspect of the data is that the growth of long-term capital fund imports when compared with that of exports, shown in Table 42, was far more rapid. This fact is likewise brought out in Chart 19 which depicts graphically the two movements. The obvious inference from it is that, if the trends observable continue in the future, another decade will see imports of all funds on long-term capital account considerably in excess of exports.

The important question is, therefore, whether or not the influx of such funds will increase in the future as it has in the past. The answer, as this analysis has shown, is contingent

CHART 19: INDEX NUMBERS OF ALL INWARD AND OUTWARD PAYMENTS ON LONG-TERM CAPITAL PAYMENTS OF THE UNITED STATES

(Sources: Tables 42 and 45)

(1920 = 100)

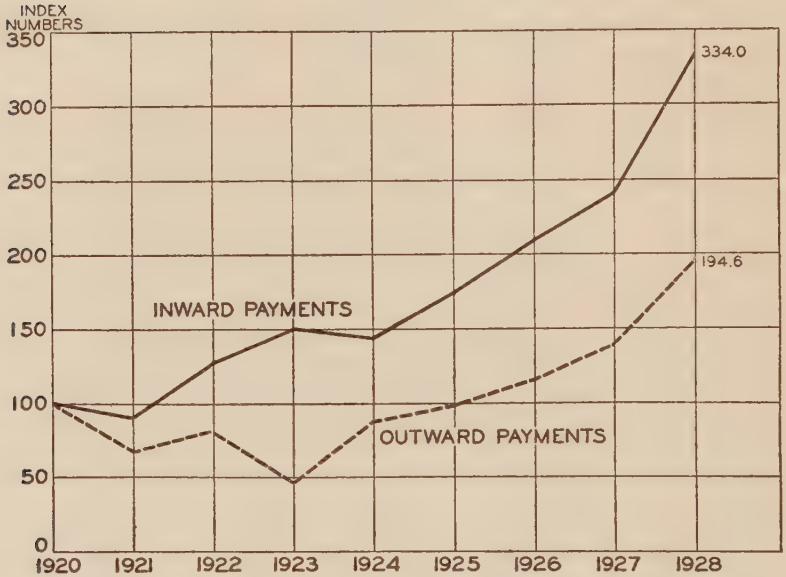


TABLE 45: SUMMARY OF AMERICAN IMPORTS OF FUNDS ON LONG-TERM CAPITAL ACCOUNT, 1920–1928

(Arrangement by the National Industrial Conference Board)[1]

(In millions of dollars)

Year	For Interest and Capital Repayment	For Investment	Total	Index of Total, 1920 = 100
1920	1,048	25	1,073	100.0
1921	861	98	959	89.4
1922	848	521	1,369	127.6
1923	946	663	1,609	150.0
1924	913	635	1,548	144.3
1925	1,051	822	1,873	174.6
1926	1,200	1,047	2,247	209.4
1927	1,253	1,338	2,591	241.5
1928	1,388	2,196	3,584	334.0

[1] See Table 9 of this volume.

upon the growth of American foreign investments; the magnitude of the interest, dividend and bond redemption

receipts therefrom; and upon the decisions of foreigners as to the investment opportunities afforded by American industry and finance relative to those open elsewhere. If we assume arbitrarily an export of all payments on long-term capital account (investment funds plus an allowance for service on American investments of foreigners) in the next decade and a half, ranging from $2.5 billions to $3.5 billions annually, employ our conjectural estimates of inflow of service receipts on American foreign investments, adding roughly from $1.5 billions to $2.5 billions for imports of foreign investment funds, the following view of the possible net movement of all payments on long-term capital account is obtained:

By 1930, exports and imports of such funds may be approximately at a balance, a small net flow one way or the other being conceivable. Thus, the situation would be approximately such as obtained in the last few years, with possibly an inward flow predominating.

By 1935, imports may exceed exports by a few hundred millions of dollars.

By 1940, the excess of imports may amount to several hundred millions of dollars.

By 1945, an even greater net importation may be expected.

It must be kept in mind in employing these highly speculative estimates, which at best only serve as an illustration, that they depend in material degree upon the hypothesis of continued exports and imports of capital funds for new investment. Assuming credit expansion is properly controlled by banking authorities and plays but a small rôle in stimulating these capital movements, it is obvious that they must depend upon new savings and the comparative profitableness, individually and in cases expertly reckoned, of foreign as against domestic production. In other words, in the final analysis, the problem of the future magnitude of the international flows of capital funds must rest upon the relative economic and financial development of the United States as against that of other countries.

No one would contend that in the future the United States will experience a less rapid economic growth than in the

past. Resources remain abundant and opportunities for their exploitation numerous. The area of the country is large, the population growing and the technical knowledge requisite for continued economic expansion accumulating. Furthermore, industrialization has centered in a few major sections and may become more widely distributed. The same situation may likewise be said to hold for Canada. Some European countries, with more compact areas, more static populations, and with older and more highly concentrated industrial civilizations, on the other hand, may grow more slowly, but relatively undeveloped countries in Europe, Latin America, Africa, Asia and Oceania, may grow more rapidly. Prospects in the United States may attract large quantities of investment funds from older European countries, while less developed countries in every area may attract investment funds from both older European countries and the United States.

The Importance of All Payments on Short-Term Capital Account

When the magnitude of the net payments on short-term capital account in the past is recalled, it is clear that they justify careful analysis with respect to the future. No net movement of payments on long-term capital account may be anticipated for many years which could not be offset by counter flows of various payments on short-term account. On the other hand, a net inward flow of payments on capital account could be greatly augmented by them.

Owing to their complexity, the nature of the principal international currents of payments on short-term capital account may be briefly reviewed. Necessarily, they move back and forth in quantities from day to day and are subject to rapid variation, depending upon seasonal and cyclical influences at work in different countries. As a consequence, the volume of international bank accounts, that is, deposit and loan accounts of foreigners in the United States and of Americans abroad, is continually fluctuating. So also are the amounts of open-book credit by American exporters to foreign importers and by foreign exporters to American importers; likewise the quantity of all short-term credit to finance international trade by means of bankers' acceptances

and other miscellaneous payments. In the present study, these intermediate fluctuations have been disregarded although they are extremely important in the foreign exchange markets, and a conception of the change in the net volume of international short-term debts and credits outstanding at the end of each year has been employed. This conception was finally modified by other evidences of payments on short-term capital account. Thus, a view of the net movement of such payments from year to year was obtained. It is the annual variation in this flow on short-term capital account which must be considered with respect to the future.

Differing factors were of determining significance in the net direction of all payments on short-term capital account in the past. For example, the large volume of open-book and acceptance credit outstanding in 1920, much of it frozen, was an all-important influence in that year, and its liquidation in the smaller outflow of 1921 and inflow of 1922. Adjustments of international bank balances and loans as a result of the widespread financial disturbances were likewise important. Factors in subsequent shifts can be illustrated from a summary of the various influences leading to inward payments, although in some years the stronger outward currents led to a net outflow.

From 1922 on, persisting unfavorable monetary conditions abroad and concomitant exchange market disruption, led to the accumulation of American balances by foreigners and the withdrawal of American balances abroad, and hence had a bearing upon all inward payments on short-term capital account. Foreign central banking policies of keeping both legal and secondary reserves in foreign exchange assets were yet further circumstances. Tied in with such policies, furthermore, were currency stabilization programs of foreign governments, necessitating American balances for exchange market control or for the eventual acquisition of American gold. Part of these balances were acquired through long-term borrowing operations of foreign governments and corporations, part through the direct purchase of American exchange, and part through shipments of gold. If they arose from the first named, from the standpoint of international capital migrations there was merely an exchange of long-

term credit for short-term credit. Of course, as was pointed out in Chapter IX, there may well have been a money transfer of the long-term funds through bank credit expansion in the borrowing country.

Where individual borrowers themselves did not transfer their borrowings immediately, there likewise resulted an exchange of short-term for long-term credit. With the increasing volume of foreign loans floated in American financial markets, an expanding quantity of such funds has tended to "hang over" in the form of bank deposits and commercial investments or to be accumulated in connection with sinking fund and interest payment operations of foreign debtors. Further influences making for larger American balances and hence inward payments on short-term account were the more extensive investing interest of foreigners in American security markets.

Other elements adding to the volume of inward payments on short-term capital account were less notable. They included short-term loans to Americans by foreign bankers; foreign acceptance financing of American trade or more precisely of the trade of foreigners with Americans; open-book credits extended by foreign exporters to American importers; inflows of short-term funds to liquidate short-term borrowings and indebtedness of foreigners; withdrawals of American balances abroad; short-term interest and commission payments; and lastly, in some years, inflowing payments because of currency exports.

The chief factors making for outward payments on short-term capital account were generally of an opposite character to those just summarized, with the exception that payments in connection with foreign balances of Americans were of a private rather than a central banking nature. The outstanding fact to be remembered from all the evidence at hand, however, is that the net movement of all payments on short-term capital account was extremely variable. In some years it was notably outward as in 1920, 1921 and 1928, in other years, 1922, 1924 and 1926, it was mainly inward; while in 1923, 1925 and 1927, there may have been a small net movement either way.

Possible Factors in Future Payments on Short-Term Capital Account

Manifestly, inferences regarding the future movement of short-term capital fund flows must be advanced cautiously. Certain features, however, may be conjectured. The recovery of the gold standard would imply fewer imports of short-term funds for stabilization purposes. Should central banking policies be widely altered with respect to foreign exchange assets and actual gold reserves be preferred, American balances of foreigners would be reduced in the process, involving an outward movement of payments on short-term account. On the other hand, should those policies be further developed, and central bank balances in America be augmented, an import would take place. The tendency recently evident for the larger central banks to increase their gold stores would suggest the former, but the volume of foreign exchange reserves still maintained and the provisions of central banking laws would intimate that the latter will remain important. Moreover, a shortage of gold would tend to increase them. In any case, there is the probability that foreign security issues will continue to be floated on the American market in volume, and some of them transferred through bank credit extension. It must not be overlooked, moreover, that a possible net import of payments on long-term capital account might reduce American balances of foreign central banks.

A growth of American bank balances retained by borrowers themselves or needed in connection with sinking fund operations and interest disbursements would be another factor enlarging inward short-term capital payments. Temporary maladjustments in the short-term interest rates of the United States relative to those obtaining in other countries should become of greater and greater moment with the closer interrelationship of international financial markets under firmer gold standard conditions. These may influence not only the amount of foreign bank balances held in America for any reason and of American balances abroad but also the development of bankers' acceptance financing of foreign trade. They might further affect loans to foreigners by American banks and also to Americans by foreign banks. Comparative stock exchange conditions and the position of the foreign exchange

market will play additional rôles. Open-book credits and the ultimate flow of short-term funds because of them resting upon confidence in international monetary stability and the effectiveness of international business and credit contacts, will constitute yet a further factor in both inward and outward payments. Finally, short-term capital service payments will have a minor part.

Whatever weight may be assigned to all conceivable aspects of the future movements of payments on short-term capital account, the forces operating may lead to either an excess inflow or an excess outflow. Any net outward stream would greatly soften the impact of a net import of all payments on long-term capital account. On the other hand, any net inward flow would greatly add to the latter. If, as has been suggested, a net inflow of all payments on long-term account achieves a substantial figure by 1930, the likelihood of its being balanced by net emigration of payments on short-term account becomes almost remote. That a net immigration of such payments might greatly augment the former is, however, a matter to be emphasized.

A Commercialization of Germany's Reparations Debt and Its Possible Effects upon Capital Flows

If the creditor governments of Germany accept the final figures agreed upon by the international financial commission of experts to deal with Germany's reparations liability and if the portion of the annuities, the unconditional share, is commercialized in line with the discussion of Chapter VIII, there arises the problem of how this may affect the possible movement of capital funds in and out of the United States. Any definite forecast, of course, would be futile, but some speculation may be hazarded in view of the Experts' Report.

Factors in the Commercialization Problem

If it is assumed that the principal reparations creditors of Germany would like to obtain a quantity of cash in hand through a commercialization of reparations bonds with which to approach the United States Government for a cash settlement of a portion of their debts to it, for example, to

discount the last ten years' payments, the following calculation will be illuminating. The present worth as of 1929 of the last ten years' payments to the United States by the principal debtor governments (Great Britain, France, Italy and Belgium) at 4% is $536 millions, and at 5%, $316 millions. What amount would be required to effect a settlement with the United States would depend upon the agreement reached as to the rate of discount to be applied. Since a share of the proceeds of any reparations bond sale would be claimed by other reparations creditors,[1] $575 millions would be needed if a 4% discount rate were applied, and $336 at a 5% discount rate. On the hypothesis that such bonds could be floated on a 6½% interest basis, roughly the current yield of the 1924 Dawes Plan bonds, but that a liberal discount of 4% on their nominal value would be feasible to make them attractive and a further 4% would be required to cover the cost of underwriting, an issue nominally amounting to perhaps $625 millions or $368 millions, hinging on the above mentioned discount rate agreed upon, would be necessary.

In view of the success of the 1924 German reparations offering of $228 millions, a new reparations flotation at either figure though very much larger would not appear impossible, assuming favorable market conditions. If the same percentage were offered in the United States as in the former year, it would amount to about $220 millions at the first figure and $130 millions at the second.[2] Financial markets of Europe could certainly be relied upon to absorb a considerable volume.[3] Furthermore, the total amounts needed would not have to be acquired through a single security offering, but could be obtained by a series of issues over a period of time.

The Effects upon Capital Flows

The amount of reparations bonds floated in the American

[1] Barring the possibility that other reparations creditors might be given a larger share of the remaining payments to be made directly by the German Government.

[2] According to a *New York Times* dispatch of Feb. 28, 1929, American members of the Experts' Commission let it be known that plans for the commercialization of Germany's reparations debt did not involve danger of flooding American security markets with German bonds.

[3] See especially, the *Journal of Commerce and Commercial*, Sept. 19, 1928, pp. 1 and 8.

financial markets, from a balance of payments standpoint, would involve an export of long-term capital funds equivalent to the sum received from their sale, from which would be subtracted underwriting costs. But if the funds are wanted to liquidate indebtedness to the United States Government, the receipts of the American bond issue would be retained as American bank balances until such employment, and hence would constitute an offsetting inflow of short-term capital until actually paid to the United States Treasury and the cancelled evidence of debt dispatched to the debtors.

The funds secured from the flotation in foreign financial markets, if remitted to the United States, would possess much more significance. They would constitute an addition to the payments on long-term capital account flowing into the country at the time they were remitted to complete a settlement with the United States Treasury. Foreign exchange holdings of central banks in America might be released to facilitate the transfer or under their direction gold might be shipped. In case central banks did not endeavor to guide the movement, pressure would appear in the foreign exchange market, perhaps leading to the migration of gold at the hands of international bankers, depending, however, upon the available supply of dollars at the time. If none of the proposed reparations bond issue is floated in the United States, or if a larger amount is offered in all markets, the consequent effects may be traced from the analysis herein offered.

The Balance of Payments as a Whole

The broader economic effects of the future international financial developments of the country may now be suggested. Only a general idea may be formed and it must remain subject to correction and modification as new facts become known. In other words, its hypothetical aspects must be fully recognized. Since gold movements will be of such fundamental importance, assuming the restoration of the gold standard to be permanent, the relationship of the future flow of capital funds to them may first be regarded. The balance of merchandise trade may then be analyzed, and finally the flow of service payments. Because of the evidence

supporting the probability of a small net stream of all capital payments moving in either direction in the next years, the following discussion will deal chiefly with the situation which may evolve at later stages.

Gold Movements

The general direction of future gold movements will depend upon the net volume of all payments on capital account moving in or out of the country as well as upon other factors affecting the international equilibrium, such as merchandise and service trade. They will vary as between the United States and particular countries from this cause, moreover, according to the predominant current of the capital payment flows. The policies of central banks with regard to their domestic gold holdings and their foreign exchange assets will be of crucial importance. This point has been stressed at some length previously and warrants a further elaboration here. The rôle of central banking operations in connection with past gold movements was pointed out in Chapter VI. Their programs had a great deal to do with gold imports into the United States before 1925 and the gold exports in that year and in the last half of 1927 and first half of 1928.

In the general process of restoring the gold standard, noteworthy modifications of its fundamental character have been effected. Gold, for example, has virtually passed out of monetary circulation in many countries, a factor which helps to account for larger monetary gold holdings of most countries at the end of 1928 in comparison with holdings in 1913. Moreover, as may be seen from Appendix B, showing the legal reserve requirements of central banks which have returned to a gold standard, new monetary laws of many countries have provided for the inclusion of foreign exchange assets as a portion of the legal reserve. Especially has the proportion of foreign exchange reserves permissible been large in the case of smaller countries, although such internationally important countries as Germany, Italy, and Belgium have enacted legal provisions for them. Finally, practically every foreign central bank has come to maintain, in addition to legal reserves, either excess domestic gold reserves or a large secondary reserve of foreign exchange assets or

both. Thus, the modern gold standard may be characterized in many instances as a legal gold exchange standard and in practically all cases as a working gold exchange standard. Furthermore, because of elimination of actual gold circulation, it may be described as a banking and monetary reserve standard.

Verification of these conclusions is given in Table 46, showing the working reserve positions of central banks which have restored some form of the gold standard. Appendix B should be referred to again by the reader in connection with it. In the first two columns are stated the working reserves of gold and gold plus foreign exchange relative to the liabilities against which reserves must be kept. The last two columns give the reserves against notes and deposits. The ratios in these columns are roughly comparable and indicate the strong central banking reserve conditions obtaining early in 1929.

In view of this situation, it would not appear likely that a strong demand for America's excess gold holdings from central banks would obtain in the immediate future. Nevertheless, so long as large holdings of American balances and short-term investments are maintained by foreign central banks, the conversion and withdrawal of a considerable amount of them in the form of gold is possible. No one can foretell what attitude will be taken by foreign central banks with regard to foreign exchange assets in coming years, but a great deal will hinge upon the net direction of all international payments on capital account because of the business transactions of private citizens, corporations and governments, and also upon cooperative policies arranged between various central banks. Declining gold production or the fear of a scarcity of gold may also exert a profound influence.[1] Some sort of balance between domestic gold reserves and foreign exchange reserves will doubtless be determined in most cases where both are legally allowed or established by policy.

[1] In this connection, see Mlynarski's brief book, "Gold and Central Banks," previously cited; and also Lionel D. Edie, "Money, Bank Credit and Prices," New York, 1928, Chapter XII, "The World Stock of Gold Money," and Chapter XIII, "The Demand for Gold," pp. 239 ff.

Table 46: Working Reserve Positions of Central Banks of Principal Gold or Gold Exchange Standard Countries, March, 1929

(Source: Federal Reserve Board,[1] Computed by the National Industrial Conference Board)

(Ratios on basis of last report of month)

Country	Working Reserve Ratio against Legal Requirements[2]		Working Reserve Ratio against Notes and Deposits	
	Gold[3]	Gold and Foreign Exchange[4]	Gold	Gold and Foreign Exchange
	%	%	%	%
Western Europe				
Austria	16	71	16	71
Belgium	36	55	36	55
Denmark	48*	73*	45	68
England	43*	[5]	32	[5]
France	41	76	41	76
Germany	48*	51*	44	47
Hungary	28	31	28	31
Italy	27	56	27	56
Netherlands	53	59	53	59
Norway	47*	63*	36	48
Spain[6]	77*	79*	63	65
Sweden	43*	78*	33	59
Switzerland	54*	79*	48	70
Eastern Europe				
Bulgaria	19	60	19	60
Czechoslovakia[6]	16	39	16	39
Danzig	..	77*	..	73
Esthonia	12	51	12	51
Finland	16	54	16	54
Greece	7	68	7	68
Latvia	52*	193*	12	43
Lithuania	37*	76*	22	45
Poland	23	69	23	69
Roumania	17*	64*	12	43
Russia[6, 7]	20*	29*	7	10
Asia and Africa				
Australia	57*	100*[8]	28	48[8]
Egypt[9]	12*	103*[10]	6	49[10]
Japan	78*	[5]	50	[5]
Java	48	56	48	56
South Africa	48	94	48	94
South America				
Argentine[8]	..	..	34[11]	..
Chile	13	99	13	99
Colombia	42	86	42	86
Peru	68	80	68	80
Uruguay[12]	45	..	45	..

[1] *Federal Reserve Bulletin*, Vol. 15, Feb., 1929, p. 148, March, 1929, p. 213 and May, 1929, pp. 340–1.

[2] Asterisk indicates reserve against notes in circulation, and unmarked figures indicate reserve against notes and deposits or demand liabilities.

Footnotes continued on page 260.

Hence, if a persisting net outflow of all payments on capital account occurs from the United States to a particular country which maintains both foreign and domestic central banking reserves, and it is transferred mainly through the accumulation of American balances of the central bank and the domestic expansion of bank credit, the time will come when it will be desirable to reduce American balances by withdrawal of gold in order to strengthen domestic reserves. If all of the foreign country's reserves are held abroad, however, no gold movement will take place, the transfer being regularly made through credit extension. On the other hand, if a net inflow of capital funds takes place to the United States from a particular country which maintains both foreign and domestic central banking reserves, the American and other foreign exchange assets of its central bank may be reduced, and can only be replenished by an export of gold or a reduction of the domestic reserve. If all the foreign country's reserves are in foreign exchange, these will be reduced, compelling the central bank ultimately to check credit expansion or even bring about a credit contraction.

When, because of accumulated American foreign investment and other causes mentioned previously, the time arrives that the United States experiences a protracted net inflow of capital funds, there will be pressure for a net balance of gold imports to appear from countries maintaining substantial domestic reserves. The volume of the gold inflow will depend upon the degree to which other shifts accompany and merchandise and service movements act to restore international exchange equilibria. Foreign central banks possessing actual gold might delay the gold shipments

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[3] Only domestic gold holdings considered. Gold held abroad regarded as foreign exchange.
[4] Gold plus total indicated foreign exchange.
[5] Foreign exchange reserves are unknown.
[6] Includes some silver with gold, and platinum in the case of Russia.
[7] Last available figures for February, 1929.
[8] Gold reserve plus London balances.
[9] Last available figures for October, 1928.
[10] English Government securities held included as foreign exchange.
[11] Bank of the Nation. Reserves relative to deposits. Reserves include gold and other cash, principally notes issued by the conversion office.
[12] Last available figures for November, 1928.

for a period when the net flow of funds to the United States first developed by the release of foreign exchange reserves but eventually would tend to release gold. But whatever the character of the reserves maintained, there would be involved checks upon credit growth, either immediately or later, in the countries concerned.

A net gold importation might not affect bank credit expansion in the United States if member banks of the Federal Reserve System are greatly indebted to Reserve banks, and the gold is used to liquidate this indebtedness. But if it were added to the banking reserves of member banks, direct credit expansion would follow. Federal Reserve banks, of course, could pursue policies mentioned in Chapter IX to cope with the situation and could guide ensuing credit developments to a considerable extent.

The Merchandise Balance of Trade

Owing to the gold movements, the alterations in central bank reserve positions and consequent relative shifts in volumes of credit purchasing power which would tend to arise from a continued net import of capital funds into the United States, the merchandise balance of trade would tend to be readjusted. Countries undergoing a retarded credit growth because of all capital payments to the United States would tend to experience some restriction of the growth of merchandise imports. Since their foreign purchases would be affected, the growth of exports from the United States would be adversely influenced as this slower increase of foreign credit purchasing power became felt in world markets. With American imports of merchandise ordinarily increasing, the export balance of merchandise would tend to be reduced or an import balance would actually develop. If American bank credit were expanding rapidly because of gold imports or for any other reason, part of this widening purchasing power would be used for imports, adding a further impetus to the trend suggested above. Finally, if the relative shifts in purchasing power brought about the price level changes analyzed in the last chapter, these changes would constitute yet another factor in the situation leading to the same consequences.

The Service Balance of Payments

The import balance of international payments for services has been relatively stable in the past eight years. Several compensatory shifts, treated in Chapter V, accounted for this stability. Probably it will obtain in the future, continuing to result in a net outflow of payments. If this import balance could increase, a considerable net inflow of all payments on capital account would be possible because of it, even forestalling a conceivable overturn of the merchandise trade balance, as it did in the past. But are its chances of increasing great?

The less important service imports and exports from the standpoint of the resulting net flow of payments may be regarded first. The net direction of payments for shipping services has been out of the United States in the past few years, although receipts for shipping services have been increasing gradually in the last few years. The net movement in the future will be contingent upon the extent to which the United States Government grants subsidies or gives protection to American shipping, a problem with which a companion study by the National Industrial Conference Board is concerned.[1]

Net international payments for government services may be slightly inward or outward. Motion picture royalty receipts will hinge upon foreign tariff barriers and motion picture development. Net insurance and financial service receipts will vary with the expansion of these types of business. Immigrant remittances will probably decline slowly due to immigration restrictions. Net charitable contributions, on the other hand, may be expected to remain approximately as they were in the last five years, unless some unlooked-for catastrophes abroad add to them in particular years.

Net tourist service imports increased slowly until 1926 and very rapidly since that date. Increased money incomes of Americans owing to credit expansion and increased real incomes due to production growth were influential in stimulating American foreign travel, as well as extended

[1] See National Industrial Conference Board, "The American Merchant Marine Problem," New York, 1929.

business and financial contacts. Persistence of this inclination and business necessity may be reasonably augured, but the rate of increase may subside. Foreign tourist travel in the United States may develop even faster than it has. Restored monetary stability and progress in production would certainly augment it. Improved means of international communication and transportation may be deemed likely to stimulate both American and foreign tourist traffic. It should not be overlooked, lastly, that international political crises may lead to a definite reduction of the volume in any year because of the psychological elements involved.

Taken as a whole, the net outward balance of service payments will not undergo rapid changes. Nor can material accretions from year to year be foreseen. Hence, it appears that the greater volume of dollars available to foreigners because of net payments for services rendered would not sustain a considerable addition above that supplied in the past. The transfer of a permanently increasing net inflow of payments on capital account, therefore, could not be greatly facilitated by the excess imports of services.

America's Future International Financial Relations

The international financial position of the United States has been notably transformed within a period of one and a half decades, although the beginning of the transition dates much earlier. Owing to the financial exigencies arising from the war and post-war problems, foreigners have become indebted to the United States on long-term investment account to the extent of about $20.5 billions by the end of 1928. This indebtedness was distributed geographically, furthermore, about as follows: Europe $11 billions; Latin America, $5.1 billions; Canada, $3.3 billions and the rest of the world, $1.1 billions. Offsetting this, of course, are foreign investments in the United States, conjecturally, $3.4 billions of Europe; $800 millions of Canada; $200 millions of Latin America and the Far East. Assuming proportionate future increases in the totals of both American foreign investment and foreign investment in America and an eventual net importation of all payments on long-term capital account

because of accumulating debt service charges, it is desirable to consider the future geographic distribution of investments more specifically in order to judge the sources from which the net inflow of capital funds may be coming.

Europe

While Europe is America's principal investment debtor, almost two-thirds of that indebtedness is owed by European governments to the United States Government. There is serious question whether Europe will continue to figure largely in future foreign borrowing on the American financial markets.[1] Before the war, principal European countries had large foreign investments which were increasing each year with the accumulation of savings. With the recovery of European monetary stability and more orderly processes of production, it would seem that their return to foreign investment would develop noticeably in coming years. In fact, Great Britain's long-term foreign investments, even in America, in recent years have grown apace, although not in the pre-war volume,[2] as have also those of the Netherlands, Switzerland,[3] and Czechoslovakia.[4] Scandinavian countries, borrowers abroad in the past few years, may certainly be expected to supply their capital requirements mainly from domestic savings, and possibly to make some foreign investments, especially Sweden.[5] Finally, France's capital market conditions are such that foreign investment may be speedily resumed, a movement already evident.[6] The rest of Europe, and especially Russia and Balkan countries, however, will doubtless remain in need of capital and might readily absorb

[1] In this connection see Bertil Ohlin, "The Future Financial Relations Between the United States and Europe," *Index*, Svenska Handelsbanken, Stockholm, Sweden, October, 1928, pp. 3–9.

[2] See an editorial, "Our Export of Capital," *The Economist*, London, Vol. CVI, Feb. 11, 1928, pp. 265–6.

[3] Ohlin, *op. cit.*, p. 6, and Annual Reports of the Bank of Switzerland and Netherlands quoted in *Federal Reserve Bulletins* for recent years.

[4] See the discussion of Czechoslovakia's balance of international payments, *Monthly Report*, Wiener Bank-Verein, Vienna, Austria, Nov., 1928, p. 83.

[5] League of Nations, "Memorandum on International Trade and Balances of Payments, 1913–1927," Geneva, 1928, pp. 94–101, 171–5, 201–5 and 229–34.

[6] An editorial, "The Export of Capital from France," *The Statist*, London, Vol. CXI, Jan. 14, 1928, p. 47; and also "Frankreich als Kapitalgeber," *Frankfurter Zeitung*, July 23, 1928, p. 4.

a major part of that available from the European countries mentioned above as well as additional investment funds from America.

In view of the fact that Germany is America's largest European commercial debtor and also the source of the funds with which principal European debtors have to repay their debts to the United States Government, special attention may be given to her status. Because of the magnitude of the reparations liabilities as finally recommended, Germany may be expected to borrow funds abroad for some years. Of course, official efforts to curtail borrowings may be partially effective.[1] In a sense, this process will represent a conversion or funding of reparations payments into commercial or private obligations. Moreover, it may be employed to obtain funds to be reinvested by Germans in foreign countries. The solution of the German problem, it is alleged, lies not only in lower production costs but in participation in the exploitation of resources of newer countries.[2]

Whatever recovery, therefore, certain parts of Europe may make from an international financial viewpoint, other areas will continue in need of capital. The former may chiefly supply the latter's requirements and a redistribution of American investments between various countries may take place. Even additional American foreign investment in Europe may develop, but probably at a slower rate than in the past. The pertinent and conspicuous consideration is that an indebtedness as large as Europe's present one can be reduced or counterbalanced by her own investment abroad only after the lapse of time. In the meantime, Europe will find it necessary to dispatch large sums annually to the United States in the form of investment and debt compensation.

Latin America

While American long-term foreign investment in Europe probably grew most rapidly before 1926, investments in Latin America have undergone a consistent increase up to

[1] Agent-General for Reparations Payments, "Report," June 7, 1928, pp. 70–6.

[2] "Germany's Share in the Development of Unexploited Territories," *Germany's Economic Development, Second Half of 1927*, Reichs-Kredit-Gesellschaft, Berlin, pp. 26–9.

the present time. Several factors point to their expansion in the future. Lack of capital supplies and hence, dependence upon foreign capital markets coupled with large unexploited resources would definitely indicate an increase of indebtedness to foreigners. That a scarcity of capital will endure, moreover, may be inferred from the stream of emigrants to Latin American shores from Southern Europe, diverted from the United States by immigration restrictions.[1] To be sure, recourse may be had to European financial markets in future borrowing, a great deal hanging upon relative interest rates and underwriting charges obtaining. Nevertheless, proximity, more firmly established financial and trade contacts of recent years, and opportunities for exploitation of resources would give promise of substantial reliance upon American capital, and an ever broadening stream of investment service funds returning to the United States, although the former for some time to come may easily exceed the latter.

Canada

American investments in Canada are large and will undoubtedly expand in subsequent years, but they may be offset by Canadian investments in the United States, which already total almost $1 billion.[2] Canada has reached the capital exporting stage and may even be counted on to match dollar for dollar of foreign investment within her boundaries with her own investments abroad, and mainly in the United States.[3] Geographic contiguity and somewhat closely integrated financial, commercial and industrial affiliations, create a harmony of interests which favors the interlacing of investments. Notwithstanding, so long as American investments in Canada exceed Canadian investments in the United States by $2.3 billions, the predominant move-

[1] Ohlin, *op. cit.*, p. 7.

[2] "Canada, A Capital Exporting Nation," citing the latest estimates of the *Financial Post*, Toronto, Canada, *Wall Street Journal*, Jan. 10, 1928, p. 15. Because the major banking reserves of Canada are regularly carried as deposits in the United States and since these Canadian short-term investments vary little from year to year, they may be regarded as having a permanent or long-term character.

[3] See also, W. E. Thorne, "American-Canadian Financial Frontier," *Commerce Reports*, June 4, 1928, pp. 571–2 and Ray O. Hall, "Canada an Exporter of Capital," *Commerce Reports*, July 30, 1928, pp. 253–4.

ment of long-term capital funds for interest, dividends and capital repayment will be into the United States.

Other Areas

Financial relations with other areas are less advanced. Africa is least important, while the Orient is obligated for American investment capital to the extent of practically $1 billions. Like South America, Asia and Oceania possess vast undeveloped resources and a paucity of capital for utilizing them. Opportunities for profit because of the large Oriental markets may be a deciding factor in directing future American investment there, and likewise the investment of other creditor nations. Comparative financial advantages will regulate borrowing and the spirit of enterprise will direct corporate investment. Profits and capital charges from Oriental investment will represent a further addition to a future inflow of payments on long-term capital account. They may be destined, moreover, to become of greater consequence, but that will be contingent upon how long new investments may exceed them.

General Conclusions

While the future course of America's international financial relations is to a large degree unforeseeable, there can be no question that it will present as many perplexing phases as at present. The United States has acquired her creditor position with amazing rapidity under the pressure of extraordinary circumstances, and some readjustment must eventuate. Viewed as a whole, if American foreign investment broadens only gradually, the time must shortly come when a lasting net inflow of capital funds may result from accruing investment charges, capital repayment and new foreign investment.

In so far as the analyses in this and the preceding chapters are correct, the first effects of a permanent net inflow of capital funds will be a shift in the rates of growth of credit purchasing power in the remitting countries relative to that in the United States. This shift will be mitigated, of course, by the policies and actions of central banks which will

exercise guiding and at times controlling influences. If commercial banking reserves of the United States are widened in the process and a rapid expansion of bank credit occurs, easing money market conditions may lead for a period to a new foreign investment boom, offsetting again the capital inflow. But this would also add to the subsequent amount of immigrating capital funds and could only delay the inevitable appearance of the net import balance.

Simultaneously, forces would be operating to alter other features of the country's balance of international payments. The relative shifts in the growth of credit purchasing power would be affecting international merchandise and service movements. Because of the character of service imports and exports, changes among them in all probability would but slightly alter their presumable net import balance. Weight must therefore be attached to a readjustment of the net course of merchandise trade, at first a reduction of the export balance and finally the advent of an import balance.

SUMMARY

The financial history of the United States before 1915 is chiefly the record of an international debtor on capital account. Signs of an altered status first appeared, however, near the close of the nineteenth century, when American investments abroad began to increase more rapidly than foreign investments in the United States. Notwithstanding this development, the country was still a debtor to the amount of about $3 billions net at the outbreak of the World War. The swift changes of the war period entirely reversed this situation and left the United States a net creditor to a huge sum, which might be placed, with allowances for war debt readjustments, at around $10 billions. Further notable shifts have taken place in post-war years involving not only new foreign investing by Americans but also increasing indebtedness to foreigners, and by the end of 1928, the country was a creditor in the aggregate amount of $22.3 billions, while a total debtor to the sum of $7.4 billions.

Extraordinary circumstances, only a few of which may be regarded as permanent factors, afforded the basis for the post-war developments. On the one hand, an unusual international dependence upon American capital supplies existed because of demoralized money and capital market conditions and the problems of post-war reconstruction and adjustment. On the other hand, a growing capacity to make foreign investments resulted from a very rapid expansion of credit which tended to concentrate in America's capital markets.

Taken as a whole, however, America's recent investment capital exports were partly offset by investment capital imports and the remaining balance was more than offset by the net inward movement of interest, dividend and capital repayment funds, especially in the last seven years. Contrary to opinion, the nation as an economic unit has not been placing larger and larger amounts of its available liquid capital supplies abroad, but has been mainly accumulating

foreign securities by reinvesting interest, dividends and capital repayment sums received each year. The varying character of short-term capital payments and credits was a final factor contributing to an "adverse" balance of international capital payments in some years and a "favorable" balance in other years.

In view of the large volume of inflowing foreign capital and capital service funds, it is not possible to link directly the persisting export balance of merchandise which has characterized America's foreign trade with annual foreign investments. To be sure, this "favorable" balance would not have been economically possible without them, but similarly the receipt of capital service charges upon accumulated foreign indebtedness also would have been impossible, as well as foreign purchases of securities in American markets. When the balances of all tangible trade, merchandise, and gold, and all service trade are combined, the balance of all trade is seen in some years to have been "adverse." Nevertheless, a large degree of interdependence obtained between the various classes of international transactions. There was undoubtedly a very real indirect connection between merchandise and service trade on the one hand and capital movements on the other, growing out of the relative changes in international purchasing power to which the latter gave rise.

Owing to the unusual influences operating to expand America's international creditor position since 1920, there seems little reason to anticipate an equally rapid expansion in the future. The United States is not a mature creditor nation, as Great Britain is, for example, and continues to experience an almost constant rate of internal economic growth. Capital requirements may steadily expand. On the other hand, there is no denying the fact of a wider interest in international trade, industry and finance. The United States may be expected to be both an importer and exporter of capital, according to the judgments of individual investors and corporations both here and abroad. The assumption of a permanent rôle as a nation predominantly in a creditor position, however, may be predicted. No volume of foreign indebtedness such as has become owed to the United States

could be rapidly liquidated. Nor could it be rapidly exceeded by the growth of indebtedness to foreigners. The present net creditor position could easily be maintained or even gradually increased.

Because of this fact a growing excess of all incoming payments on investment capital account ultimately may be expected to develop. That is, to say, capital service receipts added to investment capital imports may exceed investment capital exports plus capital service payments, although such an excess may be modified by the variable movement of short-term capital and credits. So far as merchandise trade is concerned, when this finally becomes affected, exports and imports may be expected to approach a balance with an eventual excess of imports. The economic processes leading to this consequence, however, work slowly, and the final overturn may be long delayed.

Whatever financial readjustments are necessary in the course of future events, America's international financial position is bound to be affected by the policies of the Federal Reserve System and foreign central banks. The degree of cooperation between them, therefore, will become a matter of increasing importance in the elimination of unnecessary friction and economic disturbance.

The acceptance of the recommendations of the recent report of the International Financial Commission to deal with the final fixation of Germany's reparation debt by the creditor governments concerned will be a matter of profound economic significance, not only to the countries directly involved but also to the United States. With an institution as the proposed Bank of International Settlements playing a leading rôle in organizing and directing the large movements of purchasing power required in the liquidation of intergovernmental debts, adverse effects upon finance, industry and trade may be readily mitigated to the benefit and welfare of the entire world as well as of particular nations.

APPENDICES

The Balance of International Payments

(Sources: U. S. Department of Commerce from 1922 to 1928.[1] Provisional
(In millions

Item	Credits, Reflecting Payments Into the United States								
	1920	1921	1922	1923	1924	1925	1926	1927	1928
Merchandise Exported	*8,525*	*4,683*	*4,021*	*4,368*	*4,834*	*5,177*	*5,044*	*5,091*	*5,334*
Merchandise	8,229	4,485	3,832	4,167	4,591	4,910	4,809	4,865	5,129
Silver	114	52	63	72	110	99	92	76	87
Miscellaneous[2]	182	146	126	129	133	168	143	150	..
Gold Exported	*364*	*51*	*41*	*34*	*108*	*277*	*166*	*384*	*629*
Gold	347	24	37	29	62	262	116	201	561
Changes in earmarked gold[3]	17	27	4	5	46	15	50	183	68
Securities and Other Claims to Wealth Exported	*860*	*425*	*804*	*890*	*1,041*	*1,337*	*1,585*	*1,933*	*2,857*
Outstanding securities:									
American and foreign[5]	..	73	491	617	574	746	964	1,259	2,076
Direct investments of foreigners[7]	25	25	30	46	61	76	83	79	120
Refunding to Americans[8]	151	44	99	74	214	231	176	235	237
Redemption and sinking fund receipts[9]	571	255	92	81	119	221	322	304	361
U. S. Currency[10]	103	..	40	50	..	..	..	..	..
Discount on new foreign securities[11]	10	28	52	22	73	63	40	56	63
Interest Receipts	*450*	*509*	*555*	*594*	*635*	*689*	*740*	*800*	*882*
Receipts from long-term investments abroad[12]	420	475	530	564	600	644	683	743	817
Short-term interest and commission receipts[14]	30	34	25	30	35	45	57	57	65
U. S. Government Receipts from War Debts and Credits	*57*	*131*	*226*	*301*	*194*	*186*	*195*	*206*	*210*
Interest[19]	6	40	126	167	160	160	160	160	160
Principal[20]	51	91	100	134	34	26	35	46	50
Receipts for Services Rendered	*698*	*543*	*560*	*572*	*631*	*615*	*705*	*746*	*736*
Freight services[21]	298	133	121	108	126	117	127	140	143
Services to government[22]	40	40	43	32	47	30	46	57	53
Motion picture royalties[23]	30	40	50	60	70	75	75	75	70
Insurance and financial[25]	103	104	119	99	128	134	161	143	139
Tourist services[26]	140	140	140	164	160	175	217	252	257
Immigrant remittances[27]	45	45	45	66	56	40	35	35	28
Miscellaneous[28]	42	41	42	43	44	44	44	44	46
Unfunded Credits:									
Net flow of short-term funds	..	..	375	3	216	..	359	..	..
Net Unaccounted for:									
Errors and omissions	..	319	45	..	..	36	48	..	..
Total	10,954	6,661	6,627	6,762	7,659	8,317	8,842	9,160	10,648

[1] Based on information furnished by Ray O. Hall, Assistant Chief, Finance and Investment Division, Bureau of Foreign and Domestic Commerce, and includes the latest revised figures. The arrangement here has been modified slightly from the original Department of Commerce presentation.

[2] Miscellaneous credits include bunker coal and oil sales, sale of vessels and unrecorded parcel-post shipments. Miscellaneous debits includes the same plus an adjustment figure for year-end lags, for loss on merchandise shipped and for smuggling. For 1920 and 1921 figures, ratios of foreign bunker fuel sales to total bunker exports as revealed by Department of Commerce estimates in later years were used. Statistics of bunker fuel exports may be found in the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, "Statistical Abstract of the United States for 1928," pp. 730 and 737. Bunker fuel imports were similarly estimated by applying ratios of bunker fuel imports to bunker fuel exports of later years. Williams estimated sales of ships in 1920 at $20 millions, "The Balance of International Payments of the United States for the Year 1920," *op. cit.*, p. 193. On the basis of statistics of tonnage sold and bought in fiscal years ending June 30, 1921 and 1922, U. S. Department of Commerce, Bureau of Navigation," Merchant Marine Statistics, 1926," pp. 38–9, an allowance of $10 millions for both credits and debits is made for 1921. Estimates of unrecorded parcel post shipments are taken at $30 millions both ways, the Department of Commerce estimate for the years, 1922, 1923 and 1924. The amounts of $275 millions in 1920 and $175 millions in 1921 are allowed for miscellaneous merchandise adjustments, a debit.

[3] For 1920 and 1921, from the Federal Reserve Board, "Annual Report," 1927, p. 78.

[4] See footnote 2 to Table 10 of this volume for 1920 and 1921 sources.

[5] Includes both American and foreign securities. For 1920 and 1921 figures, see *Trade Information Bulletin*, No. 144, p. 8.

[6] Williams in his 1920 balance of payments study, *op. cit.*, p. 190, as well as in his 1921 study, *op. cit.*, p. 202, estimated direct American investments at $200 millions. Owing to later Department of Commerce estimates for interest and dividend payments to Americans from private foreign investments, the figure for 1920 has been raised to $300 millions.

[7] Direct investments of foreigners and resale to foreigners of American direct investments. A figure of $25 millions is assumed to be approximate for 1920 and 1921 in view of Department of Commerce estimates for later years.

[8] See Table 10 of this volume.

[9] See Williams' previously cited studies of America's balance of payments in 1920 and 1921 for redemption and sinking fund payments to Americans in those years, p. 188 of 1920 study and p. 202 of the 1921 study. Arbitrary estimates are employed for sinking fund payments of Americans to foreigners in the same years, corresponding generally with Department of Commerce estimates for later years. The 1920 figure is assumed to include the United States Government repayment of the Spanish credit, arranged in 1918.

[10] For 1920, see Williams' study for that year, p. 184. For 1921, see the *Federal Reserve Bulletin*, Vol. 7, Nov., 1921, p. 1263.

[11] For the 1920 and 1921 figures, see Table 10 of this volnme.

[12] Figures for 1920 and 1921 are conservatively estimated with regard for later estimates of interest and dividend payments of foreigners to Americans by the Department of Commerce. Earlier estimates for this item were clearly too low.

[13] An arbitrary entry of $100 millions for 1920 and 1921. This was the figure arrived at by Williams in his study for 1920, *op. cit.*, p. 192, and for 1921, *op. cit.*, p. 202.

[14] Based upon estimates of short-term balances of foreigners in the United States and of Americans abroad referred to in footnote 29. Ratios of short-term interest to international balances evident in later balance of payments statements were employed to obtain these estimates.

DIX A

OF THE UNITED STATES, 1920–1928

compilation for 1920 and 1921 by the National Industrial Conference Board)
of dollars)

Item	Debits, Reflecting Payments Out of the United States								
	1920	1921	1922	1923	1924	1925	1926	1927	1928
Merchandise Imported	*5,778*	*2,859*	*3,432*	*4,162*	*3,952*	*4,544*	*4,766*	*4,508*	*4,497*
Merchandise	5,279	2,509	3,113	3,792	3,610	4,227	4,431	4,184	4,091
Silver	88	63	71	74	74	64	69	55	68
Miscellaneous[2]	411	287	248	296	268	253	266	269	338
Gold Imported	*393*	*696*	*275*	*329*	*324*	*175*	*238*	*230*	*357*
Gold	392	691	275	323	320	128	214	207	169
Changes in earmarked gold[3]	1	5	..	6	4	47	24	23	188
Securities and Other Claims to Wealth	*1,725*	*1,273*	*1,498*	*836*	*1,846*	*1,983*	*2,206*	*2,691*	*3,652*
New offerings of foreign securities[4]	636	675	827	487	1,215	1,303	1,306	1,537	1,483
Outstanding securities: American and foreign[5]	739	253	510	252	443	371	595	827	1,721
Direct American investments abroad[6]	300	200	116	47	113	219	240	257	378
Redemption and sinking fund payments[9]	50	45	45	50	55	60	65	70	70
U. S. Currency imported[10]	..	100	..	..	20	30	..	..	..
Interest Payments	*135*	*120*	*144*	*180*	*192*	*229*	*268*	*281*	*359*
Payments for long-term investments of foreigners[13]	100	100	120	140	150	165	190	203	252
Short-term interest and commission payments[14]	35	20	24	40	42	64	78	78	107
Government Advances	*246*	*85*	*53*	..	..	..	..	..	..
Direct advances of U. S. Govt. to foreign govt.[15]	138	17	..	..	..	..	..	..	..
Credits by U. S. Grain Corp.[16]	57	..	..	..	..	..	..	..	..
Credits by American Relief Administration[17]	5	..	..	..	..	..	..	..	..
Credits by U. S. War Finance Corp.[18]	46	68	53	..	..	..	..	..	..
Payments for Services Rendered	*1,664*	*1,193*	*1,225*	*1,217*	*1,285*	*1,325*	*1,364*	*1,403*	*1,517*
Freight services[21]	290	160	200	191	190	201	222	206	227
Services to U. S. Government[22]	140	80	89	98	100	91	95	86	110
Motion Picture royalties[23]	..	1	2	3	4	4	4	4	6
Insurance services[24]	70	70	70	70	70	70	70	70	70
Tourist services[26]	420	440	445	444	533	585	623	696	782
Immigrant remittances[27]	700	400	300	295	285	275	253	241	217
Charitable contributions			75	70	55	50	46	49	52
Miscellaneous[28]	44	42	44	46	48	49	51	51	53
Unfunded Debits:									
Net flow of short-term funds[29]	985	435	..	..	..	61	..	..	226
Net Unaccounted for:									
Errors and omissions	28	..	..	38	60	..	..	47	40
Total	10,954	6,661	6,627	6,762	7,659	8,317	8,842	9,160	10,648

[16] See Williams, 1920, *op. cit.*, p. 185, and 1921, *op. cit.*, p. 212.

[16] Williams, 1920, *op. cit.*, p. 185.

[17] United States Treasury, "Annual Report," 1921, p. 34.

[18] *Ibid.*, 1920, p. 48; 1921, p. 55, and 1922, p. 37. These credits were by means of one year notes.

[19] The figures for 1920 and 1921 are from Williams, 1920, *op. cit.*, p. 185, and 1921, *op. cit.*, p. 212.

[20] From 1920 to 1924, repayment of United States War Finance Corporation advances is included. See the United States Treasury, "Annual Report," 1920, p. 48; 1921, p. 55; and 1923, p. 37; 1923, p. 47; and 1924, p. 71.

[21] Estimates of freight services for 1920 and 1921 have been made as nearly comparable with later Department of Commerce figures as available data permit. Ratios of freight receivable to exports earned in American vessels and of freight payable to imports carried in foreign vessels evident from 1922 on are the main basis of the figures arrived at. Allowances for land freight receivable and payable were determined similarly by applying average ratios of these payments after 1922 to imports and exports by land. The Department of Commerce estimate of land freights receivable are based, however, upon estimates of earnings on transit shipments and do not include estimated receipts for exports by land. At best, the resulting figures are only rough, but they are much more accurate than those made by earlier compilers.

[22] For 1920 and 1921 figures of services to the United States Government, see Williams, 1920, *op. cit.*, p. 185, and 1921, *op. cit.*, p. 212. An allowance has been made in both years to care for miscellaneous government expenditures. Foreign government expenditures in the United States for various services are reckoned arbitrarily at $40 millions.

[23] Motion picture royalties receivable for 1921 are from *Trade Information Bulletin*, No. 399, p. 13. The 1920 figure is arbitrary on the basis of later estimates. The motion picture royalties payable figure for 1921 is arbitrary.

[24] The Department of Commerce estimate for later years is assumed to apply in 1920 and 1921.

[26] Underwriter's commissions and insurance services. Estimates for former for 1920 and 1921 are contained in sources given in footnote (3). Insurance service exports are assumed to have been approximately $70 millions, their 1922 amount as figured by the Department of Commerce.

[26] In both 1920 and 1921 it was assumed that recorded departing United States citizens indicated in *Survey of Current Business*, Aug., 1928, p. 101, spent at least one thousand dollars each. Tourist expenditures in Canada were included according to the Financial Post (Canada) "Yearbook," 1928, p. 138, and $5 millions was allowed for tourist expenses in Mexico. Finally, an arbitrary allowance was included for alien-residents of the United States temporarily abroad and American citizens living abroad. The Department of Commerce estimate for 1922 is taken as approximately correct for tourist service exports in 1920 and 1921.

[27] See Williams, 1920, *op. cit.*, 1920 and 1921, *op. cit.*, p. 202. Williams' estimate for 1921 is reduced $100 millions.

[28] Arbitrary figures for 1920 and 1921 based upon Department of Commerce figures for later years. They include imports of Canadian electric power, press subscription, patents and copyrights transferred, cablegrams, radiograms and telephone service. Exports include similar items, excluding electric power.

[29] Williams' estimate of international short-term balances as of June, 1920, was corrected by applying the ratio his estimate one year later was of the Department of Commerce figures for the same date revealed in *Trade Information Bulletin*, No. 144, p. 20. The resulting figures were then related to those of the Federal Reserve Board of June 25, 1920, as indicated in Table 8. See Williams, 1921, *op. cit.*, p. 209. The 1921 estimate gives the changes indicated by Department of Commerce figures from those estimated for 1920.

APPENDIX B

Legal Reserve Requirements of Foreign Central Banks

(Source: Federal Reserve Board)[1]

Country	Liabilities against Which Reserves Must Be Held	Reserve Requirements	
		Gold	Gold and Foreign Exchange
		%	%
Western Europe			
Austria	Notes and other demand liabilities, except state debt	..	24[3,7]
Belgium	Notes and deposits	30	40
Denmark	Notes	30	50[4]
England	Notes in excess of fiduciary issue of 260 million pounds	100[6]	..
France	Notes and other demand liabilities	35	..
Germany	Notes	30	40[3]
Hungary	Notes and demand liabilities, except State debt	..	20[3,7]
Italy	Notes and deposits, except fixed Treasury deposit	..	40
The Netherlands	Notes and other demand deposits	40[5]	..
Norway	Notes in excess of fiduciary issue of 250 million Kroner	100[6]	..
Spain	Notes	37[5,8]	45[2,8]
Sweden	Notes in excess of fiduciary issue of 125 million Kroner	50[4]	..
Switzerland	Notes	40[5]	..
Eastern Europe			
Albania	Notes	22[5]	33⅓[2]
Bulgaria	Notes and other demand liabilities	..	33⅓[2]
Czechoslovakia	Notes and other demand liabilities, less debt for state notes outstanding	..	22[2,3,7]
Danzig	Notes	..	33⅓
Esthonia	Notes and other demand liabilities	..	40[4]
Finland	Notes and other demand liabilities in excess of 1.2 billion markka	(markka) 300,000	100
Greece	Notes and deposits	..	40[4]
Latvia	Notes	..	50[8]
Lithuania	Notes	33⅓	..
Poland	Notes and deposits	30[3]	40[3]
Roumania	Notes	25	35
Russia	Notes	..	25[2]
Africa and Asia			
Egypt	Notes	..	50
Japan	Notes in excess of fiduciary issue of 120 million yen	100[5,6]	..
Java	Notes and demand liabilities	20[5]	..
South Africa	Notes, deposits and bills payable	40[4]	..
South America			
Chile	Notes and deposits	..	50[3]
Colombia	Notes and deposits	30[3]	60[3]
Ecuador	Notes and deposits	..	50[3]
Peru	Notes and other demand liabilities	..	50
Uruguay	Notes (10 or more pesos) and deposits	40	60

[1] *Federal Reserve Bulletin*, Vol. 14, Aug., 1929, p. 563.
[2] May include silver as well as gold and foreign exchange. Russian reserve may include platinum.
[3] Bank may permit reserve to fall below minimum subject to tax.
[4] Government consent necessary to allow ratio to fall below minimum subject to tax.
[5] Metallic reserve may include silver.
[6] Fiduciary issue may be increased by Government, Ministry of Finance, or Treasury.
[7] Ratio to be increased to 33⅓% by 1938 for Austria and by 1939 for Hungary. For Czechoslovakia ratio to be raised 15% at 1% a year.
[8] Additional reserve requirements when note issue reaches certain limits.

ERRATA

Footnote references on the following pages should read:

Page 21, footnote 3—L. H. Jenks instead of H. L. Jenks.
Page 28, footnote 2—1923 instead of 1922.
Page 66, footnote 1—190 instead of 191.